Between Sep 1, 2010 and Aug 8, 2012

Loss/Near Loss Listing for CSB • Richmond
Loss/Near Loss ID

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Localion of Loss/Near Loss (Pic)Carky | Acid Storage & Distr Fac, Richicack | FCC | Stautum, Richicack | FCC | FCC
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Richipūša į Daža goni (Daža Admin Office Building #2, Richipūša (Jara East) (Orther (Däža East))
Richipūša (Jara East) (Orther (Däža East))
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CUSA-CSB-0000008 EPA https://impacterm.chevron.com/IMPACT/ANYWHERE/Reports/exports/scenario_159134_f8a5390b-1c90-4874-b012-4d17412a3a40.htm 8/9/2012

CA-Richment 102/2010 Refinenced 102/2010 CA-Refinenced 102/2010 CA-Refinenced 102/2010 CA-Refinenced AN 2 10:22:010 9:15:00 1, 10:5/2010 7:30:00 FM 104/2010 8:00:00 Occurred Loss Status Type Short Description When opening an kinar opparatus doce some Lura opparatus doce some Lura opparatus del cul Lura ostantia del cul MVA en Standard Rd. Near est TEL hyecton Lara facility. ABU mainteneros is unada is conquinte actividad Pú workly dus data. The SOUTH Expendent pad et al. (Ph. 1927/WCLST work refer nomed that it has been selected to the south of Operator hit heed on pipe. Still neck. R-1010 temperature expursion Robery Field Tack Deber was hading a large (Desid) compression (# 100 Large Text Deber was hading a large (Desid) compression (# 100 Large Text Deber 100 MHz. And De we around 14.00, operator was waiting between F-510 and F-520 and Ni hard full of botemater. Operator justed head in a reaction and let a small paint in the next, x4 14.30, operator reported to the STL office that the next was gating stiff The EE colided with a reflectorted road edge marker catalog minor demage to the text and of the motor yeards. Lossifican Loss Description RLOP LIME temperature excursion on R-1310. Loss Subtype (I) The job job in Historic rall grant for Machine from Passport Pul, also jobs with large rate of from with the marked of the support of early was from listen by June 2 reduced, in Pale decided to the service of the support of early was from listen by June 2 reduced, in Pale decided to the 1th print numbers or radiability to first filter Pale on a special, or and by controlled at most captur. The Pale vocal denies has used preprinted at most special and the support of the pale of the pale of the pale of the support of the pale of the pale of the pale of the support of the pale of the pa (I) instantion is surroundings white operating a motor ventor. (1) EE was not paying attenden to dutes.

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473	469	4 65	338	334	329	307	291	291	280	174	1 5
Richmand CA - Rafnery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - 329 Refinery	Richmond, CA - Refinery	Richmond, CA Refinery	Richmond, CA - Refinery	Richmond, CA · Refinery	Richmand, CA - Refinery	Richmond, CA - Refinery
10/15/2010 12,00:00 PM	10/14/2010 12:00:00 AM	10/15/2010 1:00:00 PM	10/12/2010 11:35:00 PM	10/12/2010 5:20:00 PM	10/7/2010 5:00:00 PM	10/10/2010 5:40:00 PM	10/11/2010 7:20:00 AM	10/11/2010 7:20:00 AM	10/9/2010 5:00:00 AM	10 <i>1112</i> 010 3:00:00 PM	10 <i>/7/2</i> 010 11:00:00 AM
Closed	Closed	Closed	Closed	Closed	Closed	Closed	Clased	Closed	Clased	Closed	Closed
Near	Near	Near Logs	L02\$	Near Loss	Near	Loss	Loss	Loss	Near Loss		Logg
Minor flare activity due to deen up activity are to activity associated with Cracking area Make then acound	K-1070 shutdown and would not restart.	Cetalyzt blowdown line use caused smoldering of staging kickboard	Very small wooden scarfolding fire - no plant damage caused	#3 Boiler breaker (ripped open and strateger the funning boiler	Adminstrative deviation- Missed Title V notification for unplanned S/D	Pumped summer grade T- 3133 down the size line when it should flave been whiter grade from T- 1687.	Spider Bite	Spidor Ble	P-26 set in error to T-3180 instead of T-3073	E-1413C bad bearing causing loss of cooking and cut in HNC food rate.	Vectum truck spilled <2 gallons of MEA onto the asphalt parking lot next to the acatehoouse
Whos flow to FGC flare occurred due to K-1070 flare gas recovery compressor being down for minor maintenance and various clean up activities associated with the Creacing area complex shuddown. This KIL will serve as a placeholder for all minor fraining activity due to CABU descrup activity in the future. Business unit will teach daily activity and report at end of funnaround. Any major flare activity in the tomost support and of funnaround. Any major flare activity that impacts the community or requires semplaining will result in additional U and will be investigated separately.	K-1070 was shukdown for Maint and would not restart. Maint worked thought the night and could not find the problem	Shaging put up in preparation of FCC major had a wooden toe board touching the called ya blowdown fee, when the studieg was instaled that line was cool to the toest. During preparations to shuddown the FCC catalyst was dumped from the sector throught this time at 1000 day F. This caused the toe board to begin to amolder. The Field Operator was the staging to sop smoldering	Operator smelled amoke and immediately invastigated discovering a small inciplent stage inc. Wooden scaffoking that was in place for some maintenance work on \$5 boiler had been in contact with an uninsulated 800# sleam block valve. The boiler was staffed earlier in the evening and the valve got extremely inc. eventually dylling fire wood.	Due to refinery seam demand operations was trying to start up #5 boiler. Operations had difficulty closing the breaker on the fair to #5 boiler as maintenance was called in to roublechoot and repair. While operating the breaker on #5 boiler fan, the breaker on #3 boiler fan inipped open and shut down the boiler.	Akssed Tille V notification for unplanned shutdown of RLOP LNF plant. Needed to be submitted by the end of the next business day.	On Sunday around stiff change, idealine baith CHVN-A3-73BR for 30 mb stande pumping it pumped from 5-40 pm on 10/10 util 551 am on 10/11. It want to the Richmond Inner harbor terminal to be loaded on a brage to go to our Europa terminal. The lank pumped was summer grede CARB RULL from T-3133, when the tander called by whiter grede from 1-1607 which had been specifically blanded for this load of the economic penalty is we should is the lower RVF.	While pulling on work gioses. EE fall some liching and tuming at which time he removed them and reported the incident.	White putting on work gloves, EE felt some licking and burning at which time the removed them and reported the incident.	Starled blending T-0144, T-3073 was in the blend and spik between P-35 end P-24. RBO was not in store to T-3180 instead of T00073. Operator immediatly corrected valve lineup and the bland corrected lies! to spec. No product contentination and the CofA was issued on the blend tank when completed.	I E-1413C lost a baaring causing tha blades to hit the shrouds. HNC had to cut rates to handle the loss of cooling.	Vecturn truck spiled <2 gallons of Monoethanolamine onto the asphalt parking of moxto the Haz Ops Building. This occupied at the time time driver pulled into the parking lot. Vecturin was jost and material begon leaking to the ground. It was determined that the gasket on 4" reducer fitting had failed allowing the material to spill.
NI_Become Barnad	NL-Operational Process/Procedures - Plant Run Out/Slaw Down	NL-Fire/Exptosion	Fire/Exptosion	NL-Business Process - Business Interruption	NL-Regulatory Compliance - Non Compliance	Business Process	NL-injuryilliness - Employee injury	Injury/Iliness	NL-Quality - Product Quality (fint)	Equipment/Property Damage	Environmental
	(1) A difty Test position Contact in the K-1070 switchgoer provented it from being steried back up siter it was shufdown, (2) A diffy contact in the breaker panel of K-1070 prevented the breaker contact from classing suppting power to K-1070		(1) SOS: Design & Engineering (neutation not re-installed in a timely fashlon, Insulation taken in the backing, (2) SOS: Design & Engineering Beiler put back in service handled service belief with the being with the in service		(1) LNF SID was communicated under planned ectivity in RSL turrover. RSLs were unaware that EPC depended on this for making required noffications, (2) EFC did not review shuldown page in index, due to distractions	(1) Inadequat notification and communication between planners and I dis passancel, new personnel working Ratine Board operator) between the property of the communication of the	(1) Work Gloves	(1) Work Gloves		(1) SOS: Design & Engineering—Fend Rate Cut in Flant, Normally Run with H-Tamp, Alam with Four Fans Running, Increased Throughput from the 2007 Turbe Project 18.6 to 24. (2) SOS: Maintenance & Inspection—Fan Blades were Hitting the West. Fan Shelt was Vorm. Normal West and Tear. (3) SOS: Maintenance & Inspection—Manually Shut Cown for High Theresions. Advanced Shut Down Switch Didn't Work. (4) SOS: Maintenance & Inspection—Process running bove paint or ollings. Possible scaling of the tubes. (5) SOS: Wainting Device—Alams set for product qually not set for safety or mechanical fimits. The higher he importative the higher the amount of hydrocathon that is carried over to the overhead of the separator, reducing catalyst life.	(1) 1. Why dd product leak from fuck? - Gaskel was compromisod at 4° raducer. 2. Why did gaskel fai? - The gaskel was not known to be in bad condition. 3. Why was il not known that the gasket was in bad condition? No visual inspection of the gaskel was done. 4. Why was no visual inspection of the gaskel done? Berause litere was no formal process to do a visual inspection of the gaskel done?

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Richmond,	Refinary	Richmond, CA - Refinery	Richmond, Refenery	Richmond, CA. Refrien	Richmond, CA- Refrieny
10/17/2010	10/17/2010 3:15:00 PM	10/17/2010 10:30:00	10.47/2010 10.30:00 PM	10/10/2010 10/15/00 PM	10/18/2010 10:15:00
	Closed	Closed	Clossed	(C) (G) (G) (G) (G) (G) (G) (G) (G) (G) (G	Closed
_	Loss	623	Lass	Noser Loss	Coss
	TRIPPED GOING UP	FCC Operators Sprayed	FCC Operators Sprayed	K-940 lose of pumping capacity sursting all in products to be routed off stats.	K-840 lose of pumping capacity cavering all in products to be routed off sets!
Contract EE tripped while going up the steirs on the north side of the regen. EE	Contract EE (ripped will a going up the stairs on the north side of the regen. EE lujured right jorkly fringer wills a bopping their fail. EMT's were called and los was applied, EE relumed to work.	FCC Shuldown: During plant cleanup operations, while unletching strainer box upperations, cash strainer, hot oil sprayed out of the box onto two alse operations, cash shares to both. One was transported to the hospital via antibulance. The other was transported to work to the hospital via antibulance. The other was transled at the other and released to work.	FCC Shuldown: During plant cleanup operations, while unlatching strainer box under V-102B coke sitainer, that oil sprayed out of the box only two areas operators, causing burns to both. One was transported to the fospital via emburlence. The other was treated at the clinic and referesed to work.	At 22:15 on 10/19/2010, K-840 amps dropped off from 95 amps to 85 amps. At the same time, PC-820 increased from 50 ptig to 80 ptig il appears that K-840 lost some losding capacity.	At 22:15 on 10/16/2010, K-840 sunps dropped off from 95 sunps to 85 sunps. At 92:45 on 10/16/2010, K-840 sunps dropped off from 95 sunps to 85 sunps. At 940 lost some loading capacity.
	lnjury/lthess	Loss of Containment	เก _็ นารุ/แก _้ ยรร	NI-Quality - Product	NL- Reuipmonil/roperty Demage - Equipment Demage
	(1) Not making use of the stair handralls	(1) The cleaning for the Turnaround caused an unexpected and unenlicipated volume of calelyst to plug the strainer baskets, (2) This is the first Turnaround where the strainer baskets, (2) This is the first Turnaround where the strainer baskets were basing used for cleaning the C-90 bottoms system strainers, (3) The curnar written Job Aid did not additionable the unexpected and unantilidipated volume of catelyst to the strainer basket, (4) Operations personnel indicated that during the last few morths of the FCC run likey noticed more plugging in the strainer basket, dut to an increased amount of calelyst present. There were swert events where steam on continues the strainer baskets during routher cleaning. These events were not reported until after this incident, (5) Although expected by Refinely practices, operations personnel did not document near loss reports of etimilar incidents in the Richmond Refinely's incident.	(1) The cleanup for the Turnacund caused an unexpected and unenticipated volume of catalyst to plug the stainer baskets, (2) This is the first Turnaround where the stitaliner baskets were being used to deeming the C-bit bottoms system exhalors, (3) The curnant written bet had did not address the unexpected and unenticipated volume of catalyst to the strainer basket, (4) Operations personnel indicated that during the last few months of the FCC run they noticed more plugging in the strainer basket, due to an increased amount of catalyst present. There were saveral events where starm and het veports came out of the strainer baskets during the stainer baskets, due to an increased amount of catalyst present. There were saveral events where starm and het veports came out of the strainer baskets during routine cleaning. These events were not reported until after this incident, (5) Although expected by Refinery practices, perations personnel clid not document near loss reports of similar incidents in the Richmond Refinery's incident.	(1) SOS: Desion & Engineeting; Iron suifide scale is normal for upstream equipment/process. Tast new filter to holp miligide scale build up., (2) SOS: Mantenance & inspection; K-940x was isolated unavailable To troubleshoot electrical problems (tripoint). (3) SOS: Mallengrace & Inspection; K-940x was isolated unavailable To troubleshooting it needed. (4) SOS: WantingDevicas: Mallengrace & Inspection; Street Lubo eil in cylinder is normal. Causes of excess of cannot be determined at this time. Troubleshooting it needed. (4) SOS: WantingDevicas: Slucige could be rasult of chemical reaction of iron suifide and lube oil when exposed to Cawhan compressor is pened up to attrasphere for maintenance. (5) Sidepar issues: Design & Engineering: The least of compression capacity due to phogging/sludge issues does not normally occur on both compressors at his earne time. The cycle is normally between 18 to 24 months of good performance per compressor. With the last two to these months tronding toward enough toss of compression (and high temperature alarme) to necessation excluding the compressions; and/or eventual routing of product to off test.	(1) SOS: Design & Engineering; Iron suffice scale is normal for upstream equipment/ process. Tast new filters to help mitigate scale baild up., (2) SOS: Meinfenance & inspection; K-840A was itedated unavailable To foubleshoot electrical problems (tippingla), (3) SOS: Meinfenance & inspection; K-840A was itedated unavailable To foubleshoot electrical problems (tippingla), (3) SOS: Meinfenance & inspection; Some Lube oil in cylinder is normal. Cause of excass oil carnot be determined at this time. Troutestooting is needed. (4) SOS: WarmingDevices: Studge could be result of Chemical reaction of fron sulfide and tube oil when exposed to Chemical reaction of fron sulfide and tube oil when exposed to Chemical reaction of fron sulfide and tube oil when exposed to Chemical reaction of fron sulfide and tube oil when compressor is pened up to demonsphere for maintenance, (5) Statebarl Issues: One sign & Engineering: * The lose of compression capacity due to plugging/studge issues does not normally occur on both complessors at the same time. The cycle is normally between 18 to 24 months of good performance per compressor. With the last two to three mention tonding toward enough lose of compression (and a high temperature alarms) to necessified switching the compressors atmosphere for compression and the second of test.

https://impacterm.chevron.com/IMPACT/ANYWHERE/Reports/exports/scenario_159134_f8a5390b-1e90-4874-b012-4d17412a3a40.htm 8/9/2012

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	770	717	696	689	680	671	627	2	570	8	£	528
	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond CA - Refinery	Richmond, CA · Refinery	CA - Refinery
	10/21/2010 10:00:00	19/21/2010 5:00:00 AM	10/20/2010 9:30:00 AM	10/20/2010 1:45:00 PM	19/29/2010 12:00:00 AM	10/17/2010 12:00:00 AM	19/1/2010 12:00:00 AM	10/19/2010 10:30:00	10/19/2010 2:45:00 AM	10/18/2010 8:00:00 PM	10/18/2010 6:30:00 AM	3:15:00 PM
	Ciosed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
***************************************	Loss	Loss	Loss	F.03.	Loss Near	Neer	Near Loss	Loss	Near Coss	Loss Near	Near Loss	Loss
Sewer Cover/Grate	-5 gaion spill of low pH walor during liquid transfer to poly tank	Perticle in teft eye	Crane Load Contacted Light Fixture	Drops of cable dressing spilled to water	20 plant ove: pressured K1900	PSM Daisbase Denial of Service	Incorrect Not Cash Margin calculation	Culler leaked to ground al	Forklift caught Electrical Pull Box Cover No. FB10	Partico in right eye	Hose Modification Violation of RI-613 Discovered	STAIRS GOING UP
RTD beem fruck was periding at RTD. While pulling into the parking space the front wheel rolled over a 36" round sewer cover/graking, dislotged it and in	Low pH water occumulated from the T-3231 water washtlink clearing activity was being tensitirated from Yea Lucks to a Poly lank. A Chean Harpors to be the provided of the Chean Harpors to conclude a fine to be the country with a functo technician, on loan, were leaked with securing the hose to the sadder adjacent at the loan manway of the Poly tank. The hose worked loses from its rope infanced to secure, 11, and some of the so-pH material sphed into the berim with some (-1 gail) spitiating onto the apphalit and soft next to the berim. What want hight 1. The procedures were followed: 2. The workers were all out of the line of file, so name of the spray contected the workers. 3. The Vestell was functionally and the transfer when the hose came loose, 4. Haz Wasie presental wate functional to the control of the indeant. 5. Clean Harbors immediately inclined of the indeant. 5. Clean Harbors immediately profiled of the indeant.	Wyaft Contract EE was removing gloves at end of shift and rubbed left eye and soll the particle Chervin EMTs were called to help fixeh the eye out. EE was sent to Chirc as pairosuiten, the particle furned out to be a eye test.	A contractor crane operator was receiving relayed hand signals from two formworks with attentiting to set a lid on 2A Separator. The load contacted a light fixture causing it to be dennated Operations safely responded and took a loport.	While performing PM maint on Berth #3 DCNA 2 cables the mechanic moved the mantit in a way that the bucket chiffod and spill over the side less than a table spoon	20 plain was being introduced into K1800 feet when it overpressured the first singe PC. PC operand to flanc, steam was added to flanc, 6.10 critaries stater K1800 was note again overpressured by 20 plant, Fressure backed out NISO and RLOP atmosphatic drums, Pressure vented to flare and steam was added or better condustrion.	PSM database not allowing access for users working night shiris during	Incorrect Net Cash Margin calculation was performed and reported in our briternal refining benchmerking system (Solvchev)	Small lask occured at 6° filting, indiced immediately, but when truck was put under vacuum it did not respond and put vacuum. The crad valve had been closed by the vacuum truck divers's step-up Supervisor. The Supervisor's should was to train the driver on the need to close the roar valve menually on this particular truck. This saped was togethen about minutes tiene because had the crad valve been re-opened the fruck would have pulled vacuum when the leak was first spotted. Upon artivatio acome by regular vacuum Supervisor the closed valve was noticed, valve was opened, and task was sloped. Approximately 4 gallors of culter leaked to concrete surface before teak was stopped. Leak was immediately contained, absorbed, and cleaned up at thet time.	Forkitt driver driving over uneven surface caused the vehicle to bounce and the forks to catch the Pullbox cover plate and caused it to move sightly,	Walking into contractor office near gete 91. EE fest something to right eye. EMT were called and fusthed EE eye. After fushing EE was taking to citize for further treatment. An eyeltash was found and EE was released back to work	A steam hase was found in front of CTR Monday manning 10/18/19 with a gurden hose fitting attached to one and violeting Rt-613 accitions 3.0 Specific Use of Hose, 4.2 General instructions, and Appendix 1-A, Investigation to follow:	injured right pinky finger white stopping their fall. EMTs were called and ice was applied, EE returned to work.
	NL .Environmental -	Injury/iliness	Equipment/Property Damage	Environmentat	NL-Environmental - Revease	NL-Business Process	AL-Quality - Paperwork Incorrect/Not Sent	Ervironmental	אנ. Equipment/Preperty Damage - Equipment Damage	NL-injuy/liness - Contractor injury	NL- Equipment/Property Damage - Equipment Damage	NL-Injury/Ninese - Contractor Injury
	(1) Inadequate or no training is given to the Technician to perform the job.	(1) Hand rubbing eye	(1) SOS-Design & Engineering-Light Fixture Is on the Addise Edge of the Area Where Ihe Lid is to be Lifted on end Off. (2) SOS-Design & Engineering-Light Fixture Is on the Middle Edge of the Area Where Ihe Lid is to be Lifted on and Off. (3) SOS-Design & Engineering-Limited Number of Radies in the Refinery	(1) Mechanics didn't have a procedure that would outline the precautions need to prevent the incident.		(1) Symptom: Users could not log on to the MOC dalabase. Why did it refuse to allow log ont? Because the system had why all it refuses to allow log ont? Because the for the had reached its limit? Application had was high because the FOC Major IIA, was in progress. The application was begged down and could not process aciditional users because it was not compiled at this lime naking it less actificions.	(1) Insdequate procedure - mancial dosk guide doss not specify a stock balance recordisation or dat check - see journal notes for more adail; (2) incorced price set selected in SAPrefile - see journal notes for more detail;	(1) I. Why did product leak to the ground? 5'x4' reducer filting was not sealing property. 2. Why was filting not sealing property? Because the cambock ears if they were worn? 3. Why did we continue to use the cambock ears if they were worn? Becauses the driver thought they were of or use, 4. Why did the driver think they were of or use, 3. Why did the driver think they were of or or seal and no there were no leaks on prior work. The current acceptable operating practice is, if there is no teak, and resistance it sett on the cambock cars, and no there were of leaks on prior work. The current acceptable operating practice for the complex and the were of the cumicot's efficiency and the connection of the complex in the connection of the complex in the connection of the complex in the connection of the driver materials. Review of the cumicot's efficiency consistency of the driver materials under pressure (as was in this situation) more readily.		(1) Eye lash		(1) Not making use of the stell handralls

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890		8	860	053	840	9	803	799	787	77.1	7
Refinery		Rétimond, Refinany	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Relinery		Richmond, CA - Refinery	Refinery
Relinery PM	10/24/2010 1:00:00	10/22/2010 10/22/2010 PM	10/22/2010 11:00:00 PM	10/22/2010 4:00:00 PM		10/22/2010 11:00:00 AM	10/21/2010 8:45:00 PM	1:00:00 AM	10/21/2010 5:00:00 PM	10/21/2010 7:00:00 AM	AM.
Closed		Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
Loss	2 000	0 8 9	Near	Loss	Loss	Loss	Near	Near	Logg	Loss	Loss
High fuel gas pressure		Fall V-148, FCC	steam line under insulation broke about 2 ft, from the flange	Particle in the eye	H2S Moniter activation	Loss H2S Monitor activation	Compressor came detached from forklift	ear initation	Light Headed, Disorientated	Sewer Cover/Grate Dislodged When Driven Over Causing Minor Damage	Damaga
Haneywell DCS.		Brand: EE was inside of V-148 measuring the vessel for scaffolding to be built, and in the process of letering out the tipe and slepping backward sell hind the Udder of the vessel. The Udder is 3 in dismeter, and 8 deep, and EE was able break his fail by reaching his arms outward preventing him from failing to the bottom. EE was transported via embulance to an outside hospital for a thorough examination, then returned back to work with motified duty. FIVE WHY One 799 Report in folder. The returned back to work with motified duty. FIVE WHY One 799 Report in folder. The returned back to work with motified duty. FIVE WHY One 799 Report in folder. The returned back to work with motified duty. FIVE WHY One 799 Report in folder. The returned sell estimates until Cracketing Leciality. The fill the process of tooking out into tap and stepping backward sit into the Udder of the vessel. The Udder is 3 in disminetr, and 8 deep, and EE was able break his fall by reaching his arms outward preventing him from falling to the bottom. EE was transported via ambulance to an outside hospital for a thorough examination, then returned back to work with motified duty. Whete (Cozalen) or wifee in the process! Y-148 when: 22 Coober 2010 10-44 How. EE Fell into the vessel outer. Problem Statement (What is the key issue that needs to be addressed?): Contract Employee fall into V-148 under the returned and darkly colored). Why did "abover happan? a Contraction was not focused on their surroundings. The evilve bottom of the vessel was obscured, Coaled and darkly colored). Why did "Thappan? a Contraction was not focused on their surroundings. The evilve bottom of the vessel was obscured, Coaled and darkly colored). Why did "Thappan? a Contraction was not focused on their surroundings. The evilve bottom of the vessel was on the path, was looking or the other was a bottom of the vessel on the path was looking or the other was a surrounding to make the hexamd stand out, [Lighling in vessel did not have adequate lighting to make the hexamd sta	While insaling a blind a deletionated pipe broke about 2 fleway on the live side of the valve. Steem belied from the pipe bull no on was injured. The pipe was insulated and you couldn't see the bad pipe	WyellEE was descending the Precip when he felt something in his eye.	Brandt Koch: Bleeder was opened to steam to almosphere and there was nestidual liquid present, when released it activated 3 1125 monitors. Two EE's were work no at a towar level at V-148 and had their monitors activate with a peak of 15 ppm. Another EE was reviewing a future job and his monitor also activated with a peak of 15 ppm. All three monitors were removed from services and checked and thump tested, then returned to EE's. Eard EE reported that he was feeling fight headed so modical assistance was provided.	Brandf Koch: Bleeder was opered to steam to almosphere and there was residual kould present, when released it activated 3 HZS motitors 7 two EE's exist working at a tower level as V-148 and had their monitors active with a peak of 15 ppm. Another EE was reviewing a future job and his monitor also activated with a peak of 16 ppm. All three monitors were removed from service and checked and bump lessed; then refurned to EE's, Brand EE reported that he was feeling light headed so medical assistance was provided.	Welltech: White transporting air compressor with torklift, the air compressor came detached white transporting, incorrect style adaptor was used. Forkfit had dust style hitch and air compressor had drug style. So when forklift his burnp the air compressor came loose, the safety chains were not used.	Contract EE had ear initiation in left ear. Plant Protection was called and refered EE to go to clinc. EE's ear initiation is non-inclushral	Kocht: Et was climbing a laidele on C-180 assisting co-workers in blinding the column when he hought of the light headed. He enturned to the ground and reported his condition and EMT's were summoned.	IRTO beom truck was parking at RTD. White pulling into the parking space the front wheat miled over a SE" round saver coverignating cisiological is and in doing so the cover contacted the steps of the fruck causing mirror damage. The driver apported the incident immediately per procedure. Area was considered, until investigation was composed.	until investigation was completed.
Down	NL-Operational Process/Procedures	in _j (ry/lihoess	NL-injury/illness – Contractor injury	injury/iliness	NL-injuryilliness - Contractor Injury	injury/illness	NL- Equipment/Property Damage - Equipment Damage	Ntinjuryilinass - Confractor Injury	វិក្សារាស្ត្រាស់	NL-injuryiliness - Employee injury	Damage
		(1) EE did not mainisin ২২০ degree awareness, (2) inadequate lighting inside of the vessel			(1) Residus) Liquid in bleeder nozzel.	(1) Residual Liquid in bleeder nozzel.			(3) Information Only, Medical Personal	(1) Cover did not fit hale.	(1) Cover did not fit hale.

	NL-Injury/liness - Contractor Injury	Redwood; contractor employee was assisting another employee grit blassing the axisting of not on 1-1621. Both employees were lied of, Contractor the axisting of and set afficient grit but of a range alone on the steel grit on the coordinate of the set of the coordinate of the set of the coordinate of the set of the se	skip and fall	Near	Closed	10/26/2010 11:35:00 AM	Richmond, CA - 1172 Refinery	1172
(1) Unknown airboms particle	injury/likaess	While desning under the Expander on the MABT, EE felt something come in contact with his left eye under his spaggles.	Particle in Eye MABT	Loss	Closed	10/27/2010 11:15:00 AM	Richmond, CA Referry	1154
(1) SOS: Namieriance & Inspections: Gasket surface was not cleared whon tank was opened(open for 2 weeks). They chose not look it until the end. (2) SOS: Training & Procedures: Maintenance employee used pneumatic chise! to clean the gasket surface. Maintenance is not trained on tool used for this test.	Equipment/Property Darmage	While removing gaskot material on a manway flango surface on T-3132. The surface was gouged and in need of repair before installing a new gasket and boiling up the manway.	T3132 Demaged manway flange face .	Loss	Closed	10/26/2010 3:00:00 PM	Richmond, CA - Refinery	1147
	NL-îrjuy/liness - Employee injury	While closing #7 Boiler Non-Reitum valve efter shuling boiler down, operator celled from home, talked to STL about their back huring. Possibly from closing the non-return valve earlier, STL instructed operator to check in at the clinic and not to take the turnover until cleared Operator went to clinic @ 5:30 am. Have no further details as operator still being examined.	Operator may have injured back on 10/26 closing non-return valve on #7 boiler	Near	Closed	10/26/2010 2:30:00 PM	Richmond, CA - Refinery	1099
	พ.เเกุนกู/iliness - Cowlactor injury	Koch - Opened flange with live steam. Turned out the tag was on the wrong side. It was opened away from mechanics and no one was hulfinched with under 1938 Bushess Unit FCC Location V-2017/20 Departor area # sellify Name Richmond Refiners Unit FCC Location V-2017/20 Poseparior area # sellify Name Richmond Refinery Incident date 1027/10 1ype of Process: 150# steam Type of Equipment's Steam supply pring Team Members. Ron Moore Bosteam Type of Equipment's Steam supply pring Team Members. Ron Moore Bosteam Type of Equipment's Steam supply pring Team Members. Ron Moore Bosteam Type of Equipment's Steam supply pring Team Members. Ron Moore Bosteam Type of Equipment's Steam supply pring Team Members. Ron Moore Bosteam Type of Equipment's Steam supply pring Team Members. Ron Moore Bosteam Type of Contract Supervisor Instructed two of the PFBM to Install blinds at Identified locations, PFBM hot belied the flange on Invested by steam stot out of flange, Both PFBM of Locations, PFBM hot belied the flange on Invested by steam stot out of flange, Both PFBM duckly moved away from the stread frange to avoid segan to loosen remaining both which not be shared to the both remaining both when the steam of the section is to have specifically polinted to the exact flanges that were to be bifineded. Ellind up in quastion was tung on the five side of the sociation where and the "7' section of the large had the Pringh Ansall blinds but did not request verification flash lies for the section of the large and the "7' section of the large had not proved by an empression to the section was the and the "7' section of the large had be perfected famed the section was the and the "7' section of the large had be perfected for the section of the large was depressed for the section was the section was the section of the large between the operator claims that he hot low up to their. PFBM state blinds but did not request verification for their PFBM state blinds but did not place to the section of the processor from the percentage of the perfect of	Opened flange with five	Near	Ciosad	10/27/2010 4:00:00	Richmond, CA.	1098
(1) Head operator deviated from safe work practices.	smets Asservations - Secondary Secondary Nt-Operational Nt-Operational Secondary Secon	36" Inlet blind Installed at V-730 rollef drum prior to LOTO completion.	Relief header blinded prior to completion of LOTO	Near	Clesed	10/26/2010 10:30:00 PM	Richmond, CA - Refinery	1092
	NL-injury/iliness • Confractor Injury	Two Times employees were replacing a gaskel on a 26 inch line off reboiler on C-1400 and when employees esperated the flange that HJS personal monitors went hit o alarm, workers did in note a eny small but their monitors read 1 tippon and the other 32ppm workers stopped work to advise supervisor.	H2S personal monitors went into alarm	Loss Loss	Closed	10/26/2010 9:30:00 AM	Richmond, CA - Referry	1053
(1) New add line installed too close to the existsing fibergless earliany cower line	Environmental	The main sanilary sewer fiberglass fine located along Channel St above the 100 Channel developed a feet. The leak was caused by an acid line resting on too of the fiberglass sanilary line. The pipe support appears to have settled allowing the acid line to rost on the sanitary fine.	Santary sewer Fire leak	Loss	Closed	10/25/2010 9:00:00 AM	Richmond, CA - Refinery	1052
(1) New acid line installed too close to the existing sberglass smileny sewor fine	Equipment/Property Damege	The main sanitary sewer fiberglass fine located along Channel St above the 100 Channel developed a feet. The leak was caused by an add fine resting on log of the fiberglass sentiary line. The pipe acrost eppears to have settled slowing the ecid line to rost on the sentiary line.	Sanitary sewer fine leak	Loss	Closed	10/20/2010 9:00:00 AM	Richmond, CA - Refinery	1052
	NL-irjury/lliness - Contractor injury	MatrixEE stated he had been couphing for several days and started to hurt when he couphed. He came to work and a little into the shift he littled a board (50 - 60ba) and fell pain. Called CFD and took to the clinic where they were evaluated.	Pain in the stomech	Near	Closed	10/26/2010 2:45:00 AM	Richmond, CA Refinery	995
(1) Windows above electrical enclosures were left open, (2) indoor Electrical Enclosures are not waterproof, (3) Indoor Electrical Enclosures are not waterproof, (4) Indoor Electrical Enclosures are not waterproof. (4) Indoor Electrical Enclosures are not waterproof.	Fire/Explosion	At approximately 3:30 am on 10/24/2010 the CFD was called to investigate smoke conting from an electrical panel inside the machine shop at tatha #8. Breaker #A12 Circuit #A5733 Lathe#8 on 440v cabines.	CFD called to investigate smoking electrical panel for lathe #8 in the machine shop	Loss	Closed	10/24/2010 3:35:00 AM	Richmond. CA - P72 Refinery	972
(1) Leak in the scaling surface of the goggles due to prescription eye glasses	injusyillness	tell something in her eye. She reported her situation then started flushing her eye, EMT looked at II, then was transported to the Resinery Clinic.	Particia in Iha Fya	Loss	Closed	9:00:00 AM	CA - 936 Refinery	936

, 5 8	1351	1331	1297	1297	1291	1245	1232	1201	1199
Richmond,	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery		Richmond, CA - Reinery	Richmond CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	
10212010 12.0000	10/26/2010 8:00:00 PM	10/29/2010 5:45:00 AM	10/28/2010 4:00:00 AM	10/28/2010 4:00:00 AM	10/26/2010 12:00:00 AM	10/28/2010 11:00:00 AM	10/25/2010 12 00:00 AM	10/28/2010 1:30:00 AM	AM
Cosed	Clased	Closed	Closed	Clased	Ctosed	Clased	Clased	Closed	Closed
	Loss	Loss	Less	Loss	Near	Less	Near Loss	Near Loss	Loss
Leaking drum al location	Employee on company travel sought out medical treatment.	Trip and Fall	Contractor Particle in eye.	Contractor Particle in eye.	GHT plant Exchanger	Twisted Whist	Late reporting of inoperative compilance monitor - V-475 H2S analyzer	Missed an access point when pulting up Scott Air tape	Finger pricket
10/20/20 10 ·OCS generated a replenshment assignment for Werehouse tradien J-30 to move to location OUT608. The move continted of 4 pallete of 1 fransulex F. This location is not commonly used, and was assigned when the usual space was unavailable. The supervisor was not in the facility when the usual space was unavailable. The supervisor was not in the facility when the usual space was unavailable. The supervisor was not in the facility when the usual space was unavailable. The supervisor was not in the facility when the usual space was signed when sight and the pallet of drums to dock as finished) and the usual space was signed to the sight moves as a falsem. One confluedor inoved the pallets of drums to dock as finished) and the other confluedor look the pallets of drums of the dock and moved them into inventory location OUT608 (to clutded). These moves occurred from 15:00pm to 15:50pm is 01:50pm in 01:50pm in 01:60pm on 01:60pm in 01:60pm in 16:10pm in 16:50pm in 01:50pm in 01:60pm in 16:50pm in 01:60pm in 01:60pm in 01:60pm in 16:50pm in 01:60pm in 01:60pm in 16:50pm in 01:60pm in 01:60pm in 16:50pm	Employee on company travel had medical issue. Information for document	Contractor Employee was walking along designated walking path to get on the tora to state that Employee tripped and fell on the leg stands that are holding up the othick fence and received a small cut on each hand and a scape on each knee.		Contract welder (elk trilation in right eye at the end of his shift, white cleaning up from weld join his weld beys. He reported the initiation to his foreman. They suspected it was a slight fleah-burn and employee decided to go home.	E-1676 and E-1680 during shutdown inspection were found to be fouled and indications of pagging in the cooling water side of exchanger	Wyatt EE was moving a section of the skirting for V-70 Reactor when he trivisied his left witst. EE and a co-worker were moving the piece that had just been demoet and the co-worker lowered his had before EE ceusing his wrist to wist somewhet.	Late reporting of inorerative compliance monitor. V-475 H2S analyzer failed calibration on 10-24-10, and was not discovered and reported until 10-26-10	Upon completion of a scott air job it was discovered that one access had been missed.	washed and bandaged . EE returned to work
NL-Environmental -	Injury/iliness	injury/litness	NL-Injuryilliness - Contractor Injury	lnjury/lihess	Mr-resser-twoser-TM	รรอนแห้นทโนร	NL-Regulatory Compliance - Non Compliance	NL-injury/iliness - Contractor injury	Contractor injury
(4) 1. 48 gallons of lubricant were spilled to concrele. Why? Bottom of num was sunduned and not detected Why? It was stabbed with forbill for which operator was putting drums as stabbed with forbill for which operator was putting drums away Why? Blade west longer than the pallet Why was this blade being usef? Forbill was previously assigned to Maintenance then It was transfered to Wh?s. The operator is old pallet Why? Blade west longer than the pallet Why was the special of a stronger areas on I deallifeat the forb wave longor but the risk of using than was not legalified as an issue. Why? Blaceuse enforcement of risk identification and reporting of ahomemal conditions needs to be improved. 2. Why was the punctured drum not detected earlier? Because frequired to content leaks from damaged packaget. Why are inspections of the storage areas are not being required to content leaks from damaged packaget. Why are inspections of drum was are not being required to concrete. Why? The storage areas are not being required to concrete. Why? Detector with forbill fork while operator was putting drums away Why? Operator did not labe the requisite are when putting drums away Why? Operator did not labe the requisite are when putting loo close to the drums kwhon stabed of the perator was putting drums away Why? Operator did not labe the congulation of putting away drums and the six of damaging the drums when humpting away drums and the six of damaging the drums when humpting away drums and the six of damaging the drums when humpting as eccent dier of drums was not poperty identified. (4) S. Storage areas was not inspected prior to being used, to advess any unusual conditions (uneven looks, stacking space reduced, etc.). Why? Because supervisor was not available to inspect when storage had to be transfered to this location. Why was supervisor net available in the conditions of which was perfected prior to being used, to advess any unusual conditions (uneven looks, stacking space reduced, etc.). Why? Because supervisor was not	(1) Sharp Object exposed	(t) Temporary Fence	(1) Lack of proper eya protection	(1) Lack of proper eye protection	(1) SOS:Maintenance & inspection: Tubes Needed to be Replaced Tubes fouled. Reduced flow through the tubes. Debtis plugged the tubes. Beckwash. No PM in place, SRCM recommendation was not implemented (either clidn't get to Operations or it was missed overlockes). (2) SOS: Training & Procedures: Debtis left in exchanger when it was replaced.	(1) Co-worker dropped his end of the skining being removed white EE still had a grip on his and	(1) Checking the analyzer calibrations was not part of the daily review by the HES group		

	-	1					
	1529	1526	1517	1507	1469	1460	1368
	Richmond, CA - Refinely	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond CA - Refinery	Richmond, CA - Refnery	Richmond, CA - Refinery	Richmond,
	11/1/2010 2:30:00 AM	10/31/2010 11:15:00 PM	10/31/2010 4:25:00 PM	10/31/2010 6:00:00 AM	10/30/2010 11:10:00 PM	10/29/2010 12:00:00	10/2 1/20 10 12/20/20 10
	Closed	Closed	Closed	Closed	Closed	Closed	Closed
	Near	Near	Coss	Coss	Loss	Near Logar	0
	Personal H2S morator r sounded while worker was inside V-1441.	Hose failure	Wedge popped off valve and struck face	r citrakleen tote feak in RLOP GRU	Wiped face and eyes felt	Wharf bus radio's not functioning correctly, radio is not receiving all incoming calls. Due to the radio not working properly there is a fisk of delaying or key personnel going to and from the RLW.	Leaking drum at location
End of period processing, which allows the LeakDAS delabase to schedule our components for inspections locked up during this process. This is typically a one-hour process. The air compliance inspection group carnot create roules and populate to upload to our hand-held devices for inspections. Loss of time	While incide Vessel, V.1441 in the ARy Unit, a Veolia employee was hydroblasting the inside of the vessel, He felt his personal H2S monitor vibrate. He proceeded to the vessel entry and exited the vessel, Ho notified the Entry Attendant that his H2S monitor starm had sounded. The attendant notified their Supervisor, who in turn called the Chevron Safety Representative of the stituation.	4" in dameter and about 80 filting exhaust hose, the hose was tied of all the log of E-133 and suspended about 60ft in the air by crains. The hose expersied below the rigging apparoximety 45ft. The hose was not complicitly of the ground. The canvas material occurring list the sprail wire winding suspended in the air. The area was roped off arroll fit area secured. After booking at canvas it seemed to be worn and weathered.	A P2S EE was injured while trying to remove PV.851 at the Y-dib boundary. The trivity was to his dight cheek where a weeke popped out of the flange and sinuck him in the tace, the cut is at least 1 inch in length.	cire-kleen tole leaking in GRU.	Welltoch frewalch setting up for a job in the alleyway in the Alky Plant EE wined eyes with gloves and fell an initiation, went to the tool trailer and got an Super Sami-Chath (Semmidde Disposable Wine) and wipped face and eyes. Did not feel any better and called his foreman who cafled Plant Protection, While wailing for these arrival EE's foreman got him to eye wash station to start flusting his eyes. Plant Protection refered EE to the clinic. Released back to work.		10/20/2010 -CCS generated a replenishment assignment for Werehouse location July to move to tocation buffetts. This move consisted of 4 pellels of Transultex F. Tab location is not commonly used, and was assigned when the usual space was unavailable. The supervisor was not in the facility when the outside strongs space was assigned. The relief supervisor was also not reware that a new slorage space what savigned. The relief supervisor was also not reware that a new slorage space was assigned. The relief supervisor was also not reware that a new slorage space was assigned. The relief supervisor was also not reware that a new slorage space was assigned. The relief supervisor was slorage to the relief supervisor was selected from 15-topen to 15-topen to 15-topen of the relief supervisor. The relief supervisor was picking druns from location Our feet (who has selected supervisor was picking druns from location Our feet (who has selected supervisor was picking druns from location Our feet (who has selected supervisor was picking druns from location our from Our feet) sit is 18 to the same supervisor when the special supervisor was single of a still reportate for relief supervisor was single sit is 18 toped sit was seen puretured when the supervisor supervisor was single sit is 18 toped sit is 1
	NL-Operational Process/Procedures - Safety Systems	NL- Equipmant/Properly Damage - Equipment Damage	injury/រំបែមទទ	NL-Environmental - Spiil	เก๋นทุ/ในีกธรร	NL-Business Process - Business Interruption	Environmental
			(1) One wedge (per fange set) being used us two stacked wedges, (2) Both EE's perceived the Foreman to be a sete distance outside the line of fire at that moment			(1) There was interference from outside sources that was indering the Whist bus radio phone, in the interim 3 weeks ago we put some protections on the channel. Those protections were hittering brone operation especialty as the environment with the strid downs grew quite busy. The postable radios are fine and the security group did nothing to cause the problem.	Boltom of dam was punctured and not detected. Why? I leads was stabbed with forkfil fork while operator was putiling drums as every Why? Blade was longer than the pallet Why was this blade being used? Forkfil was previously assigned to Maintenance then it was tennisted to WHS. The operators noticed his forks were larger but he risk of using hem was not identification and reporting of abnormal conditions needs to be improved. 2. Vrby was the purctured drum not detected asrifer? Because frequent inspections of the storage areas are not being required to condrain teaks from damaged considers has not being required to condrain teaks from damaged considers has not were spilled to concrete. Why? Because the risk of tawling spills from damaged considers has not were spilled to concrete. Why? Better of take the requisition was purctured Why? It was etabled with rachiff rick while operator was pulling drums away Why didn't the operator was pulling drums away Why? Operator did not assess the risk of gailling loo close to the drums whean stacking and act to actives the risk of brimping a drum and puncturing it. (3) 4. 48 gallons of Lubrican was pulling drums away Why? Operator did not assess the risk of gailling loo close to the drums whean stacking and act to actives the risk of brimping a drum and puncturing it. (3) 4. 48 gallons of Lubrican was pulling drums away Why? Operator did not active to through the heaves placing Why? Operator was not properly formit for, (4) 5. Slorége area was not inspected prior to being used, it o address any unwood conditions (unovan hoors, stecking space reduced, asc.), Why? Because automaker was not available to happed when slorege had to be fearationed to this location. Why was supervisor not to well as a supervisor of to this location. Why was supervisor not to well as the supervisor of to this location. Why was supervisor not to well as the fearance of the pulled and the second time of drums was not available to happed when slorege had to be fearatored to this location. Why was superv

NL-kijuryiTress - Contractor Injury Contractor Injury NL-Regulatory Compilance - Non Compilance - Air NL-Business Process Business
NL-injuryittness - Contractor triury NL-Regulatory Compliance - Non Compliance - Air
Employee injury
ProcessiProcedures ProcessiProcedures Business Process
NL-Environmental - Spill
ก)นารก็โกษรร กุ้นรูกิโกษรร
NL-Regulatory Compilance - Tobacco Non- Compilence
NL-Transperiation - Company
Injury/Illness
NL-Regulatory Compliance - Non Compilance

		Chatego: Coassiss was religious start along on the laboral management			_			
(19) Driver look unnecessary tisk to extend reach with oil paddle by getting loo chose to weler's edge where surface is alloyed and slippery. 5 WHY: 1. Why did wacum funck operator sustain an injery? Ho elipped on a elipped, elippry per noar water's edge of the bloraector injel. 2. Why did he slip? He lost his blolance, and when he slepped to stendy himself his slep beconfected a slopped slippry surface resulting in all 3. Why did his foot come in contact with a slopped, slippery surface? He had optien too chose to the edge 4. Why did his foot come of the slopped slipper surface? He had optien too chose to the edge 4. Why did his foot come of the slopped slippery had not been in plece. Why was a timit like not in place? Previous procedure did not include his aspect.	[r]ury/likneas	Vacuum trutk driver was skimming the blereactor with an oil paddle when his boot contacted a slippery, uneven surface ceusing him to lose beliance and fall. The fall resulted in his knee contacting a small sharp rock which caused an abresion.	Vecum buck operator slipped and fell causing knee attration	Loss	11/0/2010 9.05:00 AM Chosed	Richmond, CA • Refinery	1840	
	NL-injury/iliness - Contractor injury	Mistrae EE are in 2nd deck of regen combustor PTing lower nozzies while trying to leave the could not make it to the next swing ladder. Contacted hole watch which got a hold of lead personnel and in touch pant protection. EE was released back to work.	Mistas EE need assistance to get cut of a hole	Near Loss	\$1/5/2010 6:45:00 PM Closed	Richmond, CA - Refinery	1829	
(1) Staging not built correctly	ไก้บารก็ไทยระ	EE hil elbow on รเหตุเกต	EE hil albow on staging	Loss	11/5/2010 9:59:00 AM Closed	Richmend, 1 CA - 8 Refinery /	1801	· -
(1) Eye lash/ abrasion to comea, (2)	NL-injury/litness - Contractor injury	WAWY, Two contractor employee's had been working inside V-040 and V-041 welding range inside vessel and at the end of shift they went home faeling fine. The next day at the beginning of thit both employees felt disconfort in these eyes and reported 8 to their supervisor.	particls in the eye	Near Loss	11/4/2010 4:30:00 PM Closed	Richmond, CA - Refinery	1799	
	NL-Quality - Product Mis-Daliyary	There was a broakdown in the Bin Realessing Procedure when Cie en Harbors miss, delivered different byn number constairing different material as oppossed to what was marifested. The step of compating the ban number to be delivered offsite to supporting paperwork and weight ticket was not printrimed.	Breakdown in the Bin Releasing Procedure and mis delivered different bin containing different malerial.	Loss Loss	11/4/2010 4;16:00 Closed	Richmond, CA - Refinery	1788	,
	NL-Business Process - Business Process	There was a braskdown in the Blin Releasing Procedure when Clean Harbors miss delivered different bin number containing different material as oppossed to what was manifected. The step of companing the bin number to be delivered offsite to supporting apperwork and weight little was not performed.	Breakdown in the Bin Releasing Procedure and mis delivered different bin containing different material.	Near Loss	11/4/2010 4:16:00 PM Closed	Richmond, CA - Refinery	1788	r
	injury/iliness	Cal Service EE Had become over heated while Inside V-70 on the 7th deck Had EE remove yvek, sil down and drink cool water. Plant Protection responded and evaluated.	Overhealed while inside V-	Loss	11/4/2010 11:30:00 PM Closed	Richmond, CA - Refinery	1771	
(1) Materials inside trash can auto ignigled. GFD did find Absorball which was probably soeked with hydrocarbans, determined to be the most likely cause of ignition.	NL-Fire/Explosion	Fleid Operacy discovered smoke coming tiom a portable trash carl in the FCC utilities area. The Operator notified CFID shuldown Firemenshal. CFID responded and extinguished smokdering materials.	Smoldering trash can FCC operating area	Near Loss	\$1/4/2010 9:00:00 Closed	Richmond, CA - Refinery	1745	
(1) Exhaust Nimes	injury/finess	Weblisch EE was on 4th dock of V-70 fire welching, felt sick and nausose, Called EE sasiley reg, which brought to chrono asilety. Pant protection was called and reterrad EE to the clinic. The furnes were coming from various frucks and equipment under EE. EE was checked out and released back to work.	sick and nauseas	sed Loss	11/3/2010 8:30:00 PM Closed	Richmend, CA - Refinery	1711	,
(1) WHAT: Personnel exposed to H2S (first alds) WHY1; Plants downwind of live relief job were not evacuated before job began WHY2: HSE and the Relief permitting participants did not enlicipate H2S vapors tavelling the distance to affact RLOP & FCC.	Operational Processal Procedures	Relief gas from live Relief Job Installing 14 Inch blind downsiteam of check valve leading to Flare gas Recovery - Tripped several H2S in plant enterest at 18 & 18 Pink and several personal monitors in Hydro and FCC. Hydro report - On Nev 3rd 2010 et approximalely 132.00 while installing a 14 inch shild into the downstreem side of a check valve to FCF, under a live lethe permit, expopors were relepted as the FCF, the FCF and fact that the Charlest H2S alarms were thepost a RLOPH's Irani and GRU 19 Pink. 5 Operators surveying 18 plant reported that personal monitors tipped. STL notified CFD and request for frem to check H2S levels at Rezovary and Channel St. RLOP advanced the plant evacuation series. CFD detected - 7 prim H2S at Channel St. RLOP advanced the plant evacuation series. CFD detected - 7 prim H2S at Channel St. RLOP advanced the plant evacuation series. CFD detected - 7 prim H2S at Channel St. RLOP advanced the plant severation series. CFD detected - 7 prim H2S at Channel St. RLOP advanced the plant severation series and FCC and Newamber 3rd, 2010: The FCC rest filed safety persons. It has been assumed that the scures of the H2S in this incident of plant sounded, which was followed by admin at 3H2S plant, and operations evacuated the plant sounded, which was followed by admin at 3H2S plant, and operations evacuated the plants to the muster points located at the Akty Linches the National Channel whose farms sounded were halve weakness higher upon the structures in the FCC, and those whose damms sounded while crossing the brigher towards the prevention of the plants whose farms sounded while crossing the brigher towards the plants of the administry of the seatoms. Hydrac Chanching Offices to water in the fact of the Akty Linches in the FCC. The follower of the administry of the seatoms.	On Nov 3rd 2010 al approximatoly 13:20 while installing a 14 Inch Efficins the downstream aldo of a check valve to FCR, under a live railwe parmit, vapors were released.	led .	11/3/2010 1:20:00 PM	Richmond, CA.	1705	<u> </u>

	NL-Transportston -	Superfixed while becking up the heating trailer, EE was trying to straighten up traker and caught the tender of the trailer on scaffolding. The scaffolding was inspected and trailer had minor damage.	Trailer hits scaffold white trying to strengthen up	Near T	Closed	11/3/2010 8:30:00 PM	Richmond, CA - Refinery	1928
(1) Did not take into consideration that the control valve would fail closed when instrument air pressure was depressured.	res-		Loss of Instrument Air to 5/TFC023A (TKC Bypass to	Loss R	Ciosed		Richmond, CA - Refinery	1500
	NL-injury/iliness - Contractor injury		PARTICLE IN THE EYE	Near Loss P	Closed	11/8/2010 10:15:00 AM	Richmond, CA - Refinery	1901
	NL- Equipment/Property . Damage - General Liability	while Nation Drilling Company approached the TWAC Gate, they did not exipe that heade and interested followed for Prevince September through the gate which resulted in the pale dowing on the Nation Drilling Company vehicle. Minimal damage was done to the fund however, the TWAC gate was also damaged. The gate is still operational and no guardis needed to man the gate.	Damage to TWIC Gate	Negr	Clased			1898
	NL-Injury/lihess - Contractor Injury		<u> </u>	Near Coss S	Closed	11/7/2010 4.30.00 PM	Richmond, CA - Refinery	1872
(1) External corrosion on line	Equipment/Property Damage	the normal and and dimately it of to high	#5 Castro fresh water line ruplured behind the refinery scale house.	2 3 #	Closed	11/7/2010 11/30:00	Richmond, CA - Refinery	1809
(1) Uneven surface	หางานไทยรร	Wysit EE working in the bottom of Regen suppost and twisted ankle.	Contractor EE twisted	520	Closed	11/7/2010 11:40:00 AM	Richmond, CA - Refinery	1868
(1) K-1050/K-1070 suction K.O.'s could not remove level fast enough and caused K-1070 to trip off line due to the high level.	NL-Operational Process/Procedures - Safety Systems	High lavel LH1655 on Y-1050 shuldown K-1070, Pumps NP-1050 and MP- 1050A, had problem with Lile end/feaming liquid, North, South and Riop Flares for 8 mm.	High level LH1055 on V- 1050 shuldown K-1070	Near T	Closed	I.	Richmond CA - Refinery	1864
	NL- Equipment/Property Damage - Equipment Damage	The forkift was moving a table from one weld bay to another. Had a spotter, The forks were about 5 feet aff the ground While bringing the table into the weldbay the forks hit he top of the weldbay and knocked a staging leg off it's wood support.	Forkill tapped a slaging	Loss	Closed	11,5/2010 8:35.00 PM	Richmond, CA - Refinery	1850
	NL-Fire/Explesion	Walf! Wallach; A welder inside V-70 at the 5th deck white working noticed a and or reg?? hanging from a scafedd bar snotking and burning. He stopped work and passed the burning clothing through the manway to the entry allendars! who promptly extinguished it with a dry chem and water.	Burning shirtrag inside V- 70	Loss 7	Closed	11,6/2010 3:00:00 PN	Richmond, CA - Refinery	1845
(1) Ventilation blower	in)wy/iiiness	ton ten	Particle in the Eye, V-70	505	Clased	11.6/2010 2:30:00 PM	Richmond CA - Refinery	1844
(1) Faiture to follow procedure to reciave import cargo through the fill fire. (2) Federal to document the fire fire. (2) Federal to document the fire fire. (3) The tark does not yet have a secondary Independent high level alarm. (4) Faiture to recognize that lanks with solid gauge well will alwaye have discrepancy on the actual level vs. the Sash Indication,	NL-Operational Process/Procedures - Safe Operating Limit (SOL) Exceeded		T-1514 filled above SOH from Oregon Voyeger discharge	Coss	Cosed		Richmond, GA: Bad Refinery	1843
(1) Faling hammer	tnjury/illness	usu ara in thirto, when a narminer sitting on bod #4 was bumped and eil ihru a manways and made comised with the Operator on the shoulder. The beds are about 18" apart and the estimated height the hammer fell was 8 to 10 ft.	Cheyron EE struck by falling hammer	Loss	Closed	2:24:00 PM	CA - Refinery	1842

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2171	2122	2095	2066	2043	2040	2037	†996	1977	1970	1942
Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery
11/12/2010 10:00:00 AM	11/11/2010 4:10:00 PM	11/10/2810 4:40:00 PM	11/11/2010 3:25:00 AM	11/10/2010 10:00:00 AM	11/10/2010 11:15:00 AM	11:/16/2010 11:45:00 AM	11,9/2010 5:30:00 PM	11.9/2010 12:00:00 AM	11/9/2010 9:30:00 AM	11/8/2010 4:40:00 AM
Closed	Closed	Closed	Ciosed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
Loss	Loss	Loss .	Loss	Near Loss	Logs	Loss	Coss	Near Loss	L053	
Chevron EE Iripped, skioned Knee	Periodo in the eye	Low point bleeder was opened to check for contaminates	Moving a hose and wire jammed in top of right finger	Operator inadvariantly backed into an electrical panel and imped breaker 2-558 @ #7 Power Conter	Pinchad finger during demoillion of old Firewater Pipe	Particle in the Eye, E-1	A LIVE RELIEF WAS PLANNED FOR TURNOVER THE CANTROL NIGHT SHIFT AND NO ALL PARTIES WERE ALLOWED TO PROBE TO THE GONTROL ROOM THROUGH AN EVACUATED AREA WITHOUT KROWNED OF THE WORK, ALL INVOLVED PERSONN HAD NOT MADE IT TO THE CONTROL ROOM FOR TURNOVER POR TURNOVER PROBESSING THROUTH AND NOT MADE IT TO THE CONTROL ROOM FOR TURNOVER POR TURNOVER	inp the totalizer i no visable flame	Slight abrasion to eye ild	Dust from grit blast triggered asihma to fibre up
EE was walking along the road on the wast side of the Precipitator, he came up to live tamps ever tiple in the walk way, he stelped over the first namp and hipped while stepping over the second camp. He did I and shringed his latt knee	Wyatt EE, working on the 4th deck of V-80 felt particle in eye.	In preparation for a job we needed to know the concentration of contaminates for the job We knew the system was sour so we were going to do the job in fresh air The operator was ask to check the job He found a low point bleeder to check as he opened the bleeder some stand came out. He checked the bleeder and found that if pegged link LE, sensor and the 152 showed 2pm then he proceeded to block the bleeder in There was a slight breaze blowing east in the direction of the Bigge craw of four One reported being lightnessed and natureated his personal H2S sensor did not show any reading of exposure. The other three did not compilate of exposure.	Wydt EE was moving a ventialion hose in the reactor, the lie up wire periodizate his gloves and plenced his finger. Plant Projections responded and suggested that EE goes to the clinic for further assistance. Clinic deened further and gave a totanus shot for preventive maintenance	Utilities operators were working in RL(DP power center 87 when a breaker was accidentally ripped. The inactional nile pocarried when a utility operator bumped into the tip lewer of a nearby breaker. The breaker was immediately reaks and the affected equipment was put back on fine without incident. None of the plant products went off test and these was no environmental impact.	Contract endoyee was working with a co-worker repositioning a plean of 6" pipe for removal. While pulking the pipe his right ining finger was prinched between a scaffold beard and the pipe. Contract amplitype was a valuated by Chavron EKIT's and transported to Chavron Medical Clinic for further treatment. Employee was post accident drug tested and returned to work with no limitations.	Matrix: EE was working on the channel section of E-192A when he broke for lunch. During lunch he started to feel a irratation to his right eye.	THE LIVE RELIEF WAS SCHEDULED FOR THE MIDDLE OF OPERATIONS MIGHT SHIFT TURNOVER TIME. RLOP WAS NOT NOTIFED THAT THE EVERY WAS TAKING PLACE UNTIL AFTER THE START, NOT ALL OF THEIR OPERATORS HAD MADE IT OT THE CONTROL ROOM, THE RIOP OPERATORS WERE ALLOWED TO PASS THROUGH AN EVACUATED AREA TO THE CONTROL ROOM AND ALLOWED TO ENT THE WAY WITHOUT BEING INFORMED OF WHAT THEY WERE WALKING INTO A SOUTH SIDE OPERATOR HAD TO GO INTO THE EVACUATED AREA TO TO GO TO THE EVACUATED AREA TO TO GO TO THE OVERSLINE SUCTION PRESSURE EL SHUTDOWN AND ONE OR CREEV WAS INFORMED THAT THIS WAS TO THE PLACE, ADEQUATE THE WAS NOT ALLOWED ACCORDING TO THE DAYSHIPT MEETING WAS SUPPOSED IN PLACE PRIOR TO THE START OF THE JOB AND NOT ALL PERSONNEL WERE PRESENT.	DHT shut down clearing up and popping to relief, PCO didn't Readjust the compressor teating fast enough to catch the traditizer trip.	EE performing entry ellected cluddes attempting to move from one side of V- 100 to the other extreded a mild shareaton to his left eye did Area was very confested and focusing on his footing cludn't see a rope used to keep a larp over the entry point in place and made confect with the rope which caused the abrasion.	liggle EE was in the canne whom a dust cloud from gril blast doulor the cab thraw open door find cleased a stiftma to false up. EE contacted his forenan and they got chevron safety who called plant protection. After evaluation plant protection called AMR for further evaluation, EE was released and returned to work.
injury/iin ess	in)ury/iiiness	NL-Environmental -	injury/iiness	NL-Operational Process/Procedures - Plant Run Out/Slow Down	injury/iliness	Injuryfilness	NL-tossons Learned	NL-Operational Process/Procedures - Safe Operating Limit (SOL) Exceeded	เก็กมัน	រៅ្តាស់មួយស្រួ
(1) Employee fell in the plant when he tipped over a %' pipe Installaid between lank and process drain. Why did the employee fall? Employee fall because he did not see the pipe mataliad at ground level, Why did the employee not see the pipe. There was two reasons the employee did not see the pipe, the employee did not see the pipe, the employee did not twee system path and the pipe was not pathed to improve wishbillity.	(1) Alibome Particle	(1) Low point bleeder was opened to check for contaminates	(1) Pieca of Wire			(1) Airborne Particle			(1) Ropo	(1) Airborne Dust

https://impacterm.chevron.com/IMPACT/ANYWHERE/Reports/exports/scenario_159134_f8a5390b-1e90-4874-b012-4d17412a3a40.htm 8/9/2012

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	2279	2276	2256	2252	2238	2222	2211	2206	2196	2196	2193	2165	2182
	Richmend, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmend, CA - Refinery	Richmend, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refnery	Richmond, CA - Refinery	Richmond, CA- Refnery	Richmend, CA - Refinery	Richmend, CA - Refnery	CA - Refinery
	11/13/2010 2:00:00 PM	11/14/2010 12:30:00 PM	11/15/2010 5:45:00	11/15/2010 7:30:00 AM	11/15/2010 3:30:00 AM	11/14/2010 8:00:00 AM	11/13/2010 10:40:00 PM	11/13/2010 3:45:00 PM	11/12/2010 4:45:00 PM	11/12/2010 4:45:00 PM	11/12/2010 10:00:00 PM	11/12/2010 10:00:00 AM	12:40:00 PM
	Closed	Closed	Ciocod	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
	Loss	Near	5	Loss	Loss Negr	Near	Negr Loss	Coss	Loss	Loss	Near Loss	Loss N	L025
•	Pely tank damage	A parked Wharf Safety Operator pickup got bumped by Forklift tre during it's use to hydrotest cargo hoses.	EE over-Extended right Tumb at Turnstle when Iumstle suddency stopped when EE was going thru it	V-80 EE hil with a failing	Contractor EE hit in shoulder by flash light in cat cooler		Hole watch's position was not the best variage point	EE sluck in elevator	Vessel overflowed white toeding with fresh carbon	Vessel overflowed while loading with fresh carbon	Parsonal H2S Monitor Activation & Loss of Contain, during Maint, cut line procedure	Senilary Sewer Line Leak Off Channel SI near Haz. Waste Offices	Sieg burn to hand
		Sunday 1/1/4 st 12:30 pm: A Whalf Operator backed a torklift into a pickup parked in Berth 4 causing very slight clamage to the fender area just below the driver's side brake light, above the rear bumper, Operator reported the incident a day later to his normal crew HO who reported it to the STL.	EE bagded in at the turnstile in front of Boller shop, the EE heard the crick end stands towelk snot pushed the turnstile, studdenly the turnstile stopped and curne back causing the righ turns to ever extend	IT Thorpe, EE was relieving the hight shift crew on the V-80 ridger job and was hit by a failing harmers white standing on the coaffeding at the bottern of the fiser. The arght shift crew were lowering their tools when a brick mason harmer came loose from a retractory bucket barig lowering with a rope to the bottom of the fiser, Bucket botting justed was not a black bucket used by cherron, it was a reinforced refractory bucket with lugs.	Walt vs Wyalt; EE was working in cal cooler when flesh light from two decks up Nt Jim in the right shoulder, Plant prolicelon responded no medical treatment receded. EE had no pain and signed release waken:	During the DHT Turnaround, the plant H2S sounded and personnal working the turnaround were orderly execuated. The plant alarm cleared quickly. Loss time 30 minutes	Wallech Hole watch's position was not the best variage point for keeping 100% eye contact with the individual working in E.135. EE was 2011 away near craims.	Wellech; Elevator Operator was stuck in the stevator below the second well-ripped the focking device for the door at the second level, had EE put ladder inside elevator in place and camb out the trap door on the roof and exit though the door.		A Celigon driver/lechnician overfiled one of the B&S carbon vessets while transferring a truck load of frest: carbon to it. This resulted in frest carbon spilling to the surrounding ground and plugging the area's process drain.	Chevron; After drilling a pilot hole during out line tape procedure, It we impurating (gold) product excaped from line. Mechanic on the job had part of his coveral (over garments) coated with light. HZS monitor activated. No peak reading was everilable, monitor was reset in the field.	Fiberglass Sanitary Sewer line cracked at the lie in point from Haz. Waste offices off Charnel St.	Whatt, EE was cutting on the skirt at the 6th level when some stag feel down into this gove causing two mirror burns to the back of his head and the back of a finger.
	өбешеді Башады Батары	NL-Transportation •	irjury/iline es	ใญ้มาyilliness	Ntinjury/illness - Contractor injury	NL-Environmental - Release	NL-injury/illnese - Contractor injury	NL-Business Process - Business Interruption	NL-Environmental • Spitt	Environmental	NL-injuryilliness - Employee frjury	NL-Environmental - Operational Leak	Injury/Iliness
(1) SOS: Training & Procedures: Valve Covernot Re-	(1) SOS: Training & Procedures: Valve Cover not Re- installed . (2) SOS: Training & Procedures: Procedure does not Cover Removing & Replacing Valve Cover. (3) SOS: Training & Procedures: No Guidelines for Checking the Tank Raling for Temperature. No Guidelines for Ensuring Tanks on Sile meet temperature Ralings for tasks being performed. (4) SOS: Training & Procedures: Centract Company was not notified that their equipment had been damaged in a timely fashlon.	(1) Driver inartention while driving forklift too close to second vehicle allowed forksit to rub against pick up parked focus by (2) Failure to promptly report the vehicle accident during same shift	(1) SEE hyper extended her thumb. 1: Why? Thumb contected turn tille bar, 2. Why? Turnstile bar stopped abrupity, 3. Why? Limited Turnstile colation, 4. Why? Previous EE passing thru turnstile of not complete rotation, 5. Why? Turnstile allows passage without complete rotation, 5. Why? Turnstile allows passage without complete rotation, 6. Why? Turnstile allows passage without complete rotation for this scenario we did start a second branch (Why? Second Blanch of 5 Why. EE hyper extended her thumb. 1. Why? Thumb contacted turnstile bar, 2. Why? Embryos elidri rayocat the turnstile to stop. We stopped here and sake veryone to go slow that the burnstile and grab a bar to move the turnstile with your hand.	(1) Baing in the line of fire				56	(1) Why - Too much access water in the vessel Why - Water drain not opened Why - These vessels require this special procedure (spening of water drain) that was not known to him Why - Calgon Management didn't inform him of and provide him with this procedure (requirement.	(1) Why - Too much excess water in the vessel Why- Water drain not opened Why - These vessels require this special procedure (opening of water drain) that was not known to him Why - Calgon Managaman (drift) inform him of and provide him with this procedure i requirement.			(1) Sing

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	2440	2447	2440	2394	2386	2376	2303	2303	2300	2282	2279
	Richmond, CA • Refinery	Richmend, CA - Refinery	Richmand, CA - Refinery	Richmond, CA - Refinery	Richmond, CA Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA Rafinary	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA Refinery
	11/17/2010 12:00:00 AM	11/17/2010 12:00:00 AM	11/17/2010 1:45:00 PM	11/17/2010 1:00:00 AM	11/16/2010 10:15:00 PM	11/16/2010 11:30:00 AM	11/16/2010 12:30:00 AM	11/16/2010 12:30:00 AM	11/15/2010 5:10:00 PM	11/15/2010 2:00:00 PM	11/13/2010 2:00:00 PM
	Clospd	Clesed	Closed	Closed	Closed	Clased	Closed	Clased	Closed	Closed	Closed
	Loss	Near	Loss	Near Loss	Cosar	Loss	Loss	Loss	Loss	Near Loss	[08
	Loss NH3 leak at 18 _E R	P-3028 pump oil dripped out on to steel deck.	Chevron EE taken to Refinery Clinic with chest pain.	K+1006 M1 cylinder valer jacket hek forzed the S/D of K+1006 for repairs, K-1070 was also down for maint and LOTOD, K+1060 was S/D isoleted and repaired in 40 minutes with no flating or flate totalizer tips.	trippad over hote and argon boilte fell between EE legs	T-3220 Primary Seol Fabric Disintigrated	Cell phone takes out of office	Cell phone taken out of office	Loss of 6 S/C from LNC to	EE bumped knee on R. 1610 Top Heed lifting kig	Prdy lank damage
RLOP beard operator got a high NH3 slam. RLOP outside operators responded and decided to activate plant evacuation alarm. Outside operators responded such al. It was disconned that the upstream double orbit isleation dones to act along the solution of the solution of the solution of the solution was teaking. This valve inclaims the strippers from the schubers.	RLOP board operator got it high NH3 starm, RLOP coultid a pownlors responded and decided to activate plan! evacuation alarm. Outside operators domaid Sook Ahr. It was discovered that the upstream double certil stopping realized sook and the secretary. This varies socialize the strippins from the scrubbers. Pressure was alean off the system and levels defined to mitigate the NH3 releases were valued and off the system and devels defined to mitigate the NH3 releases. Which has been called to re-pack the varies, group with orbit isolation CC from C16:00 to C18:20. All dear was given and work was allowed to continue.	P-302B pump condensate knockout petock opened stightly. Pump oii (ISO 150) drained onto outles sump steat dock.	Chevron EE Taken to Refinery Clinic with chest pain to be evaluated by Clinic staff.	At approximately 1:00A.M. The K-1060 water jacket Filling to ± 1 cylinder first stage broke and began Sorating water everywhere. The compressor crew was here working on the K-200 and want over to repair. Operations SID and isolated the machine and Maint Replaced the broken water jockst filling. At this time K-1070 in SID and fold for math. So heliber FGC was running. All sections in Isonax were excess of the Issues and moroiloned the relief headers. Flare gas header pressure is 0 "h20 at this time. No flaring.	P2S EE was unloading argon bottles off forkith and tripped backwards over steam hose and bulls at a levenen EE legs. EE said he was fine and signed lebass form from Plant protection.	During seal inspection of T-2220 discovered the primary fabric has distributed at the research in schives there existed year 1959 version of EF-821 is very large that the test of the research in schives there existed year 1959 version of EF-821 is very similar to the 2059 version and in a footnoie front highlighted in table) sometiments. Test on malerial fabric for primary seal of high H2S concentration stop tent. But, the year 1959 version (only one sheet) does not make any norman sociation for the high H2S concentrated stop tarks application. We stegan engineering of the T-2220 tenk in early 2000 and do not recall what year version of EF-822 (65 or 2000) was a valishing to be used, if the year 2000 and version of EF-822 (65 or 2000) was a valishing to be used, if the year 2000 and the stark offer. If the the primary seal stafts, although the EF-822 was part of the lark offer. If the the primary seal stafts, although the EF-822 was part of the lark offer. If the year 1906 version were excitable, then CBI and that for the primary seal stafts, although the EF-822 was part of the lark offer. If the year 1906 version were excitable then, the urethane was used as default urethand has been used broadly as primary coal stafts and in majority of task pages.	Smog Busters- A cell phone was taking out of their mobile mink effice. Plant Protection was notified and report made.	Smog Busters- A cell phone was taking out of their mobile mini office. Plant Protection was notified and report made.	LNC 8 S/O bet flow to T-3168. Pump checked out fine, Product was routed off tost to FcC feed lank. Letter in shift, 86.8 operators found small section of steam tracing out service and fine cold. Tracing was turned back on and time teach back by L.NC routed product back to inth with no issue.	Crane and Rigging Co. EE bitknee on R-40 10 Top Head Iffing Jig while selfing to rigging and getting head ready to solist. Head that id be tlipped 180 degrees before holising to lop of R-1810, EE total beatmen that knee opt Ni and tristation which first All about 2.45 PM knee started to silfen up, at that point EE was driven to Ciricia by Coren and Rigging Co. Red Hat Sutely parson.	Saturday, 11/13/10, a Poly tank was found leaking in D&R from the top seem. It was noted at the time that the lank was very werm, (Poly Tank Max operating itemperature limit is 140°; it is estimated that < 5 gatons of p4 10 Spent Chemical Chemical Soldion belowed into the process can onside. The material was removed from the Poly tank and it was taken out of service. Two other Poly tanks were also used in this service and will be evaluated for their integrity as well.
	Operational Process/Procedures	NL-Environmental - Operational Leak	injury/iiinass	NL-Operellonal Process/Procedures - Plant Run Out/Stow Down	NL-injury/ilfness - Contractor injury	Environmental	NL-Security - Property Loss or Thef: - Physical Property	Security	Quality	NL-injury/litness - Contractor Injury	Environmental
	(1) packing leak		(1) Personal Medical	(1) Failure of a carbon steet screwed fitting of the water jacket cooling system on K-1050 # 1 cylinder due to apparent corrosion and age.		(1) Primary seel fabila not best sultable for sour water service	(1) Then	(1) Тлен	(1) SOS: Design & EngineeringWork on Steam Tracing is Het Included in the LOTO Process & SOS: Tracing & ProceduresWork on Steam Tracing Not Captured on the Turnover. SOS: Training & ProceduresNo One Walked the Line Before Commission-ing II Back Into Savices		installed, (2) SOS: Training & Procedures: Frocedure Jobs not Cover Removing & Replacing Valve Cover. (3) SOS: Training & Procedures: No Guidelines for Checking the Tark Rating for Temperature Ratings for testage that part and Side Training & Procedures: Contract Company was not 14) SOS: Training & Procedures: -Contract Company was not notified that their equipment had been demaged in a timely lashkon.

2547	2547	2527	2511	261	2496	2493	2459	2462	2449
Richmond, CA - Refinary	Richmond, CA- 2547 Rafinary	Richmond, CA - Refinery	Richmond, CA - 1 Refinery	Richmond, CA - 2511 Refinery	Richmond, CA - 6 Refinery	Richmond, CA - Refinery	Richmond CA - 9 Refinery	Richmond CA - 2 Refinery	
11/18/2010 10:30:00	11/18/2010 10:30:00 AM	11/18/2010 4:40:00 AM	11/17/2010 12 00:00 AM	11/17/2010 12:00:00 AM	11/18/2010 11:05:00 AM	11/18/2010 8:30:00 AM	4:50:00 AM	2:00:00 AM	
Closed	Closed	Closed	Closed	Closad	Closed	Closed	Closed	Closed	Closed
S S	288	Negar Ossa	No.	Coss	Logge Togge	[]	Nos.	1088	Loss
Operator was injured while installing a pressure gauge	Operator was hived while	Flaring event from loss of cooling water pump p-460	Plastic, orange industrial Obbits bin move adjacent to the hot exeast of a diesel powered light plant. Hot exaust melted and damaged 2 layers of the bits plastic oxterioriappendendges. The filling ald was damaged.	Plastic orange industrial Dabris bin moved adjacent to the hot aroust of a diesel powered light plant. Hot avaust missed and damaged 2 layers of the bins plastic stricts phastic stricts phastic stricts phastic damaged.	Twisted Ankle, Wyatt Tool	Pinched Finger, Elevator	2 H2S siams went of	Upper back muscle pain	NH3 leak at 19pit
During precommissioning checks on the new level gauge/transmitter for V734, an operation was intuited by a pressure gauge onto the top want of the new valled the new toward of the twent of the new toward on the visual manuary fragas that are next to the operator chose to stand on the visual manuary fragas that are next to the operator was lightening the access the very wave and instal the pauge. As the operator was lightening the gauge, the pipe wench slipped and claused the operator to case balance and light back on to the deck. The fast wes approx 2.5-31 from the top of the manway flast back on to the deck. The operator land of the operator is the deck. The operator also should be interested to the raining along the dock with the right side of his others. The operator discussion of the pain in his beginnite and class. Plant protection was called to come out and affected the content. The operator field back content to the content. The operator was called to	During precommissioning checks on the new have gauga/transmitter for V34, an operator must initialing a pressure gauge onto the top vant of the new gauge glass. The gauge glass is located on the first deck of V734 and the vent valve is overhead and unaccessible for most people. The operator trous to allend on the Vessel memory franges that are next to the gauge glass for so allend on the Vessel memory franges that are next to the gauge glass for the valve and finded the gauge, as it is event valve and finded the gauge, as it is event valve and finded the gauge that are when the prevalve to less balance and fish back on to the deck. The still was approx 2.5-3ft from the top of the manual flarges to the deck. The operator lands deck and celled the anide on inpacts. The operator also struck the railing along the deck with the right side of he count. The operator is pain in his beginning and creat. Prent protection was called to come out and attend to the operator. The operator w		Orange ID bin, managed by Wasta Management contractor through the Haz Waste group was discovered during a Haz Waste sudfit to have been rolled away from its original drop off point, to a location adjected to a desay loop and the provinced light plant, very oner its ectuar. The radiant heat generated from the available provinced the bins exterior plastic at the lifting sol. In addition to the damage incurred to the bin, the teel radiating hip this area of the bin could've easily it the bin's contents on fire.	Orange ID bin, managed by Wasie Management confractor through the Haz Waste group was discovered during a Haz Waste sudit to have been rolled away from its original drop out point, to a location adjacent to a discal powered light plant, vary poar Ib secast. The addishmit hoat generated from the axeual phe maked the bins extend plastic at the lifting so, in addition to the damage incurred to the bin, the sheal reclaiming into this area of the bin coold be easily in the bin's contients on fire.	<u> </u>	Wellech: EE was spaning one of the double doors to the elevator when another EE closed the opposite door, pinching his right frog finger,	Wollted Two H2S monitors alarmed. EEs were doing clean up on £1681 Fraian doct. The DAR fixe went of and so did their alarms. They didn't smell anything felt five, not dizzy, nauses, or headsche, Both EEs are the end returned to work. End of shin.	JTThorps: EE was litting hex mesh and felt muscle pull. Plant protection responded and sent to citric for further evaluation.	release. Machinists were called to re-pack the valve, along with crici sodalion LC from C1810 to C1820. All clear was given and work was allowed to continue.
HL-injury/liness -	trjury/likness	NL-Environmental •	NL- ReupintantiPraparty Dantage - General Liability	NL-Fire/Explosion	trjury/ikn e s	injury/liness	NL-injury/liness - Contractor injury	injury/lihess	Environmental
(1) The operator stood on the manway while installing the pressure gage, (2) An incorrect tool was selected to perform the test of installing the pressure gage, (3) Not all those present at the job site recognized the operator standing on the manway as as high risk task and none used Stop Work Authority to stop the operator from continuing to install the present of the stop the operator from continuing to install the	(1) The operator stood on the manyay white instaling the pressure gage, (2) An incorrect tool was selected to perform the task of instaling the pressure gage, (3) hot all those present at the job site recognized the operator standing an the manyary as a high risk task and notre used Stop Work Authority to app the operator from continuing to install the pressure gage.	(1) Wet steam supply to TP400, (2) MP526 Spare pump did not come on line	,		(1) Uneven surface	(1) Body position, (Hand)		(1) Improper lifting techniques	(1) packing leak

	L	N	Na.							,,	[<u></u>	
20	2747 R C R	2737 F	2731 R	2729 H C P	2714	2655 F	2618	2610	2599 F	259B F	2597 F	2691	2555
Echmond,	Richmond, CA - Resnery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Rofinery	Richmond, CA - Refinery	Richmond, CA Refinery	Richmond, CA - Refinery	Richmond, CA - Relinery	Richmond, CA - Refinary	Richmond, CA - Refinery	Richmond, CA • Refinery	Richmond, CA - Refinery	Refinery
Richmond, 11/23/2010	11/22/2010 10:45:00 PM	11/22/2010 5:00:00 PM	11/22/2010 11:15:00 AM	11/22/2010 12:30:00 PM	11/21/2010 12:00:00 AM	11/22/2010 1:30:00 AM	11/21/2010 12:15:00 AM	11/20/2010 4:10:00 PM	11/19/2010 9:30:00 PM	11/19/2010 9:30:00 PM	11/19/2010 8:30:00 PM	11/18/2010 6:30:00 PM	2555 Refinery PM
	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Clased	Closed	Closed	Closed	Closed	Closed
	L093	Loss	L098	L099	1.003	Near	C 03		Neer Loss	Loss	Near	Loss	Loss
15# steem commissoring	Light strained knee	Particle in the aye	Particle in Eye - First Ald	QCO cut hand with laboratory glassware while oregating a sample for distillation.	Punctured Finger	Pain in the right groin area	K-550 shuldown on high	Contract EE contact with Dimethyl Claulide on Leg while handing Flox Hose.	Particle in the eye	Puncture to the palm of the left hand	A morter sample block fell and grazed EE's leg.	17 pump station deluge and fite morator systems activated	H2S Monitor want off
	Bigge - EE was going down the stairs on the compressor deck, Saw a hose stretched across seme stairs and went to move it. Want to stide the hose off by moving it with his foot. When he did his foot stuck on the graining and his knee continued causing discomfort. After lunch it was stiff so CFD was called	Waltech - EE was working at S-300 when he fell the wind blow something into his eyes	Employee was walking a cross parking lot in front of Cracking Area Control Center and a small piece of what appears to be portig insulation got into their eye and wedged lisself under the eye fild. Employee was coming from the field and had on proper PPE which included safely glasses.	The QCO was sating up a sample for detilizion lesting by the D66 method. The QCO was preparing and cleaning the glassware in the Ostilitation area forme hood. A glass distillation receiver inche during preparation. As the QCO prepared to clean the axea, the noticed that broken glass had penetrated her glovers and out her hand. She suffered a 3/8" cut and was sent to the chind on first lest. The clinic control of the chind chind control of the chind		Wellech - EE was emplying trash bags on the Rx structure He fet a little path in the right goth area around 130AM. About 3:30 Il had gollen progessively worse so he called his company safety, who called the Chevron safety	K-550 shuktown on high vibs. TK-550 train tipped out on vibration on the utorine side. All point were at -5 mils with vibration shut down limits at 4.2 mils. This was a very guide want. The turbins tripped on high vibration. 5 seconds after seeing the 1st elent.	Enlogristo Transportation Co. EE came in contact with Dimetryl Disutide on Intigh part clea white Transling fizz hose etiling first has extend first hook-up to system hard piping for thit? Plant Start-up. Fixx Hose came off EE Truck and Product in Hote from previous job? EE was removing Brass plug, bending with hose easing on leg white removing pilug and that hose was not under pressure as explained by EE co-complete. EE on job at 500 AM and this was a first hook-up about 4:10 PM, MSDS was on job site.	Welter. EE was walding up the structure states and lest something in his eye. Went to an eyewash and rinsed his eye and the perticle was cleaned out. EE thinks it was an eye brow.	JTThorps - While removing loase motar and debts from 5-300 EE punctured fits hand on some of the wire that holds the monter in placo. This was caused by a loas of balance.		If pump stallon deluge and find monitor systems activated and would not shull down when cessi. It lock quite an strot and sme to manually isolate, A couple of various vere shuck and viously not operate and one isolation valve had to be staged for access before it could be closed. While the monitors were furnifing they weathed mud and mak down after 17 -85 and pugged the sump.	Wyatt - Scilamaxer was working in E-300 holding some plate to be tacked. When the walder started welding the cenary went off
Nr. Qualty .	Injury/lliness	injury/iliness	injury/ilin e ss	ัก _ไ นารห์กิจรธ	Injury/Nness	NL-injuryilliness - Contractor injury	EquipmanUProperty Damage	וין ווין איז איז פנז	NL-Injury/illness - Contractor Injury	injury/INness	NL-injuryilliness - Contractor injury	NL-Operational Process/Procedures - Safety Systems	NL-injury/illness - Contractor injury
(1) No impact-created 15# steam PSSR package was developed since no work was expeded to be on the system. Better oversight on the process to help the Head operator needed, (2) Shudown Head Operator did not understand the impact of incomplete PSSR's and or not enough systems covered, (ie barting a 15# steam system with only 1 flem), (3) 1. Operator assumed the line work that was being traced out was 150# steam since the EVO stated 150# steam and did not inclicate all of teh lines being worked on (15# steam was	(1) Improper body position	(1) Wind	(1) Airborne particle was due to turnaround activities (re- inssiation work near-by). Employee had on safety glasses with side shields for basic eye protection.	(1) Incident was an accident.	(1) Improper gloves		(1) (Causal Fador #1, Condition #3) Equipment Difficulty - Design Design Specs - Problem Not Anticipated, (2) (Causal Factor #2, Condition #5) Human Performance Difficulty - Management System - SPAC Needs Improvement - SPAC Incomplete, (3) (Causal Factor #3, Condition #1) Human Performance Difficulty - Management System - SPAC Net Used - Accountability Needs Improvement, (4) (Causal Factor #3, Condition #3) Human Performance Difficulty - Management System - SPAC Needs Improvement - SPAC Incomplete, (5) (Sausal Factor #4, Condition #1) Equipment - SPAC Incomplete, (5) (Causal Factor #4, Condition #1) Equipment - SPAC Incomplete, (5) (Causal Factor #4, Condition #1) Equipment - SPAC Incomplete, (5) (Causal Factor #4, Condition #1) Equipment Difficulty - Amagement - SPAC Incomplete, (5) (Causal Factor #4, Condition #1) Equipment Difficulty - Design	(1) Liquid in hose		(1) Loss of balance			

	3243	3220	3220	3209	3204	3166	3162	3028	2869	27.4
	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA. Refinery	Richmond, CA •	Richmond, CA - Refinery	Richmond, CA - 8 Referery	Richmond, CA - 9 Refinery	2748 Relinery
	11/30/2010 10:00:00 AM	11/30/2010 1:00:00 AM	11/39/2010 1.00:00 AM	1172972010 10:00:00	11/29/2010 8:20:00 PM	11/29/2010 8:30:00 AM	11/29/2010 12:45:00 PM	11/27/2010 1:00:00 PM	11/23/2010 12:00;00 AM	ΑM
	Chosed	Closed	Closed	Closed	Closed	Closed .	Closed	Closed	Closed	Closed
	Loss:	L085	Loss	Lo SS	Loss.	6218	L Na	To No.	Near	Loss
	FCC SID EE feeling	The 130A Line slub off from the 262 Line going to T-3196 ruptured under the road going into 15 Pump Station	The 130A Line stub off from the 262 Line soling to T-3196 Auptured under the road going into 15 Pump Station	TOP INVESTIGATION: Irollay holding reaction mix blind fell from Leeam	TOP INVESTIGATION; S. 75 illo valve oponed 75 illo valve oponed r white staging being stemoved	Carry deck crane hit overhead waming sign & wooden conduit support	FCC S/D Numbness; Personal Medical,	Flu Syptoms	800R product rouled off-	mechanically complete
This invostigation is being conducted by Chevron Shipping. Local incident entry for tracking purposes only. At 12:10 pm the Florids Voyagar avanifiled that desertant which splitted onto the deck, approximately 3 lesspons or	Chevron: Et working in the "Altey" on a crane crew began to feel nauseous ettor smolling vepors since the beginning of his shift. NGRU was in the process of being propared for shift up thin prior shift and operations when to the stea after being notified of the odors and washed the area down. The area shifted clean, and the odors improved but were still present. After 2 to 3 hours working on the crane next to this area, Ett requested medical extention when he started to feet iti.	On 11/20/10 at about 01:00 It was reported that a spill was occuring into 13 Pump Station in the Pelayard area. The Blending and Shipping Shiff learn Leader, Crude Head Operation, and Crude Field Operator responded to find a gazoll leak pushing out under Bridge #199 at 15 Pump Station. After chocks done by the Operators, it was identified that the leaking inte was the 130A, I.ne. Prior to the incident, the 130A Line. Prior to the incident, the 130A Line.	On 1/02/10 at about 01:00 it was reported that a spill was occuting into 15 Pump Stallon in the Polegard area. The Bendring and Shipping Shift barm teader, Chulo head Operator, and Crude field Operator responded to find a gastell leak gusthing out under Bridge #199 at 15 Pump Station. After checks done by the Operators, it was identified that the flushing lins was the 130A Line. Phot to the incident, the 130A Line was being used to route the TKC gas of production to T-3106.	ā	TOP INVESTIGATION: FINAL DESCRIPTION IS IN THE INVEST JOURNAL OR SEE THE LINK (LEFT) Original Description: while Chevron Instrumentation, PED, and Walley Stinson (valve comp.) from day shift, Were stoking slide vidve. The valve was obseed when mechanical began to shock, gave a command to open and the valve standed to open. PED saw a stage fligger was braing shimed! by elbows so he would not fall through (approximately 16Fb.). PED yelled to does a very. Alvie was a doesd immediately. The Brain EE was removing scatfold from the 4.5 deck down and than the plug seat. As soon as a firmatified was lifted out, a chail ladder was being dropped down at same time the valve was being opened.	. Mechanic was driving it it an everteed support to another, it damaged the rt board was painled op down with warning	on Industrial		HAIF product wont off-test for pour space as result of DMC shutting down during an increase in feed rate to the pient. The work station operator reinabled the DMC and the HAIF product was routed off-test when the plant pour spectoeched -9. The product was routed off-test for six hours.	
	seaulli/kn/(u)	Environmai	Loss of Containment	Equipment/Froperty	NL-Injury/Illness . Contractor triury	Equipment/Property Damege	NL-trjury/Illness - Employee Injury	NL-injury////ness - Contractor Injury	Nt-Quality - Product Quality (Int)	Incorrect/Not Sent
	(1) PLant Odors	(1) The 2003 inspecion Recommendation was not completed as written, (2) The 2009 inspection dd not UT any of the points where demagned insulation was noted in 2003	(1) The 2003 inspection Recommendation was not completed as written, (2) The 2009 inspection did not UT eny of the points where demaged insulation was roted in 2003	(1) SOS: Design & Engineering: #2209 Billod Feil Onto Reaction Mix Velve, Trolley Holding the Bind Faked Franno Assembly Sippeed Off I-Beam Series 632 Trolley was used. Easier to use (one rigger can install), Design of Trolley. (2) SOS: Méritenance & Inspection: Franne assembly (sides) were installed incorrectly. Install instructions were sort visible, naturellons were painted over. Painved to designate as Chevron rigging devices. (3) SOS: Sidebar Issue Training & Procedules: "Although disregarded during this incident, company employee attempted to institude their SVA, as encouraged at all levels throughcut the refinery. "Although not communicated at the lines there was a need to secure the incident side for safely purposes. "Some apulpment involved in the Incident was removedimoved shortly after the Incident, bus not allowing a proper investigation, given the serious nature. No one was able to tate prodocs of the Incident side, visual information could not be gathered.	(1) SOS: Training & Procedures: Stage rigger almost fell. HSE recommandation to visually verify not followed: Thought no one was in the area. Sol an all clear by reidio. Scraffold rigger working near/inside side valve. Stage rigger inside ethn't know about the test. Stage Riggers where hot included in HSE. No Communications. Not all affected Workers get frichided in a HSE.	(1) Mechanic missed judged height of boom being raised from crede (standard operating procedura) while itayeling				define the work that was taking place.

a		G.	۵.					(4)				
9710 R C R	3700 R C R	36 30 R	3627 ROR	3625 R C R	8 8 707	3698 R C 74	3546 R C R	3525 R	3409 R	3406 R C R	3372 R	3326 R
Richmond, CA - Refinery	Richmond, CA Refinery	Richmond, CA - Refinery	Richmond, CA.	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	ū	Richmond, CA - Retinery	Richmond, CA - Refinery	Richmond, CA Refinery	Richmond, CA - Reflaery	Refinery
12#72010 12:36:00 PM	12/7/Z010 8:10:00 AM	12/6/2010 3:00:00 PM	12/6/2010 2:30:00 PM	12/6/2010 10:15:00 AM	11/15/2010 12:00:00 AM	12/3/2010 12:10:00 PM	12/5/2010 7:00:00 AM	12/2/2010 11:00:00 AM	12/2/2010 8:00:00 AM	11/25/2010 8:00:50 PM	12/2/2010 3:30:30 AM	N
Closed	Clased	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
 Loss Loss	Near	Loss	L No	Loss	Loss	5	Near	Near	Near	Near	L. 0.52	Loss
Lifted PRD on C-170 to Railist - Tripped Totalkar	Possible strain in Contract employee's lower bullocks.	Particle in the Eye, Z-21 fine	Project sectricians were drilling a hote in a PLC junction box for a new conduit; area operations reported to the sectricians reported to the sectricians reported to the sectricians temperature on the Emissions Reduction Device (ERD). Cause of the problem is under investigation	Contract Employee Exposure	Non- BAAQMD permitted storage of Custamine in RO Plant	contractor slipped and fell	Sulpper Water product Off- test	EE faeling iii	Orakı pipe tripping hazard In walk way	PLC failure during Jet JP8 Injection run	particle in eye	Florida Voyager spill
	As 3 sub-contract employees were positioning a piece of rebar weighing approximately 10th into place, the employee on the end felt a pain in his lower left buckets. It appears the individual was trying to nucles the rebar into the proper location using his body.	P2S; EE had finished cuiling off some temporary lugs on the Z-21 line when he heard sorreone on the sleck above him. Other EEs were cleaning the deck above to ellow the socifoid to be ormoved and as he looked up come debris fall and a small metal particle became looged in his left eye.	The project birchidans were drilling a hole in a Hollman Junction box that certained a PLC for the ERD. The electricians signed in with the area operators and obtained a non open frame pairm; for the drift, while they were performing their work the area operator came to from and fold them they received a few temp atom on the ERD. The electricidans are not sure what caused the starm, but they believe the body of the drift may have pushed the fush of the holder to be pushed in, this may have caused the PLC to power down causing the atarm.	Goabat Pavog; While a Contract Employee was installing a U Boil at the Alty Upgraded project, an unknown release occurred cessiving the employee to become neureablad and light headed. The mease any of come from a nearby seem trep, but theit was not confirmed. Plant Protection and Operations was immediately informed.	Organio Compound (Custamine) stored on sight in container with a capacity greater (han 260 galtens, Violation of BAACIAID Regulation 2, Rule 1-123.	EE was coming out of dehroom and turned the comer and slipped and felt.	7 am siripper water 80+ yellow and PH 10.2 routed OFF-Test	traveller that had	HYDRO SISO P-360 Diain pipe tripping hazard in wak way	A row grade of Jet (JP8) production required the installation of an injection stud at 21 Pump Station. This skid included a Programmable Logic Controller (PLC) to confud he rate of chemical injection during JP8 blands. Sconn after commissioning, the PLC faulted during the lineds. Sconn after	P/32 EE was helping to guide a port hand to hit the culling line on a pipe and white holp quiding beese a maist liew was of the blacks and entire into the top of EE sately glassos and entered eye. Plant protection was called and flush EE eyes unable to enzone and EE was sent to Cárric. The clinic was able to remove metal particle.	manual checklist. Notifications also made by T&8 STL.
MRegulatory Compliance - Permit Exceedance	NL-injuryilliness - Contractor injury	Injury/lifness	NL-Business Process - Business	NL-injuryiliness • Contractor injury	Regulatory Compliance	ไท]นาร/ไม่ดอรส	NL-Quality - Product Quality (Int)	NL-injury#iinesa - Employee injury	NL. Equipment/Property Damage - General Liapility	NL-Business Process - Business Interruption	injury/เหกอรร	Environmental
(1) With commissiong of several systems from lumaround mode, CBO missed high level condition in C-170 which lead to overpressuring of Column when steam was introduced to reballer.		(1) Falling Particle	(1) The temperature indication on the Emission Reduction Device (ERD) yliopped to 32 degrees wither It was it service. Why did the temperature indication drop to 32 degrees? Why did the temperature indication drop to 32 degrees? While the electricians were drilling a hole in the bottom of a Hotman box the offic conteached he side of a 24 voll power supply. Why did contacting the power supply cause a temperature indication drop? The cap on the spring baded trust hoder was brotzen, in fact the slightest louch would scause the fuse to come out of the holder killing power to the power supply and causing the loss of the temperature indication.	(1) UNKNOWN vapocs	(1) Nalco employees not aware of the BAAOMD permitting limit of 260gations for transportation AND storage of organic compounds, (2) Chevron HES employees not aware that Natico can transport chamicals in one size lote and transfer to a different size to take for storage and use	 Immedialely after EE fell, Maria Melendoz and Kelly Campion Investigated the area and found the floor dry and free of debris. 				1	(1) Improper PPE, should here also been wearing a face sheld.	Shipping, (2) To be provided by Chewon Shipping

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	4012	3955	3936	3925	3924	3924	3923	3888	3871	3860	3828	3782
	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA •	Richmand, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmand, CA - Refinary	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinory
	11/15/2010 10:00:00 AM	12/12/2010 11:10:00 PM	12/12/2010 9:40:00 AM	12/11/2010 8:30:00 AM	12/11/2010 12:30:00 PM	12/11/2010 12:30:00 PM	12/11/2010 11:45:00 AM	12/10/2010 5:00:00 AM	11/16/2010 12:00:00 PM	12/2/2010 12:00:00 PM	12/9/2010 7:38:00 AM	12/8/2010 3:28:00 PM
	Closed	Closed	Closed	Closed	Closed	Ciosed	Closed	Closed	Closed	Closed	Closed	Closed
	Negr Loss	Loss	Neer	L N eas	Neer	Near	Loss	Near	Near	Neer	Near	Near Near
Manager Advance - Manager	Wrong tensioning head ordered and used	Loss of K-1600 H2 recycle compressor due to high layel in V-1616B suction boitte		Exchangers E-1683//B over pressured and leaked to streesphere	small fire on top of percipitator	small fire on top of percipitator	Insufation fire at top corner of Precipitator	loss of K900 after K900A would not slart	Perchloroethelene level not checked at the upstream sample point.	Failure to LOTO the 2-12 Dieset Line properly for mainlenance work	Flow to FCC and Alky flare during F-70 lighting	Start up of C-1020 caused flow to FCC Flare
	DED work instructions called out for a certain tensioning head to be used on Reador ells. When field auditing the job it was discovered that he wrong heads were being used. One flenge had sineady been completed at his time. If his time had not been caught there is a possibility that the flenges could have leaked on sterlup, the reador head could have been stripped out, gashets and or gashet surfaces could have been not provided the caught the stripped out, gashets and or gashet surfaces could have been ruined or stude could have been demaged.	00 12 December 2010; NNF K-1800 shull down on V-1818B HHI, the shudown of K-1800 caused F-1810 to go to min. fire on LL H2 flow. F-1810 officeed R-1810 cat farmp, to drop, R-1810 temp effected C-1850 BTM product 500R to go off test. Routed off test for 3.5 hours.		During startup the distillation section was circutating The fine to the reactor loop was blocked in but a samples station was left in circulation mode and unbocked. And it leaked into the Exchanger's E1882-VB tube side the outeit was blocked in to prevent liquid from gelling to per procedure reactor. The shell side was stirculating H2 and we picked up heat from the discharged of the compressor (K1870). The E1883's were battle up and we had a chock valve on the stream origin to the exchanger this check is use it feed pump is stost your don't back H2. It over pressured the exchanger and it leaked to the almosphere	A small insulation frie on K13-B inlet on top of the percipitator	A small insulation fire on K13-B inket on top of the percipitator	Repairs were recordly made to insutation in that same area of the fire due to wind damage. The plant is currently in the process of starting up and the recipitator is new heating up to operating temperature (~550 dagF) due to the fluo gas. There is some sort of blanket that was used during the repair that layed between the outer metal surface and the insulation, it is that blanket that caught fire.	(KS00 got a high temp alarm on the motor whoding, So the stenday mackine (KS00A) was set up to start K900A was started and got electrical fault alarm and immediately shutdown (<1 minute). Electrician was working at the FCC shutdown so the was asked to help us trouble shoot (K900A. He found an attem on K900A, that fead Time over current C phase tip 88 handle. Acround same time 6 K900 shut down. This relay/alarm was reset and K900A was started.	Parciblioneshtals level was not checked at the upskeam bleeder, Procedure was modified to stiminate this step, it was not known at the time that hits was a ray 8 Air Beard requiriment. Perc is otways present at the upstream sample point above PEL. It was felt this sample was not needed and by eliminating it the tisk of exposure would be eliminated. All other steps of the procedure were followed.	The 2-12 Diesel Line was LOYO'd on dayshift 12/3/10 in preparation to be laken out of service for maintenance work. On 12/3/10 a LOYO Audil was done and finee PRD localibras were found on the line to be un-tagged/un-tocked, as well as Yellow Operator tags that incorrectly had the wrong line name entered.	While tighting off F-70 Natural Gas pressure spiked lifting safety to relief, 902cd at FCC Flare, 47sd at Alky flare, No flame detected, no samples triggered.	collet to prevent forming a vecaum as this equipment cooled. This information was certified in the operators furnever. For start up the field operator was told to close the bypass. The field operator closed the bypass on V-1020 and was unaware the bypass for C-1020 needed to be closed as well. As the colourin filled with liquid a flow to reisef caused flow to the FCC Place. The flow meter 12F1/251 on V-1251 (reiter furn) was inoparative which caused delays in determining the source of flow. Flow to the flace that of the 12FPM, A total of 4502scf noted on totalizer, a sample was triggered. No fame was delected.
	Nt-Lessons Learned	Operational Process/Procedures	NL-Lessons Learned	NL-Environmental - Spili	Nt Equipment/Property Damage - Equipment Damage	NtFire/Explosion	Fire/Explosion	NL-Environmental - Rejease	Nt-Regulatory Compliance - Non Compliance - Air	NL-Operational Process/Procedures - Sefety Systems	NL-Lessons Learned	NL-Lessons Learned
(1) SOS:Design & Engineering: Loss Profit Opportunity: Shift (~12 hours) Delay at GHT.K-1870 pressure control valve would not aflow lurbine to rotate and reach desired RPMs during start up. Institutional notwow. Not enough steam was gotting to the comprossert. Valve Irim was downsized. EWO initiated and approved for valve reconditioning was used for		(1) Why did K-1600 shuldown? Shuldown due to high level in V-1616B Why to V-1616B have high level? Unable to determine this cause.		(1) Start up procedure did not have detail to ensure sample aystom was blocked in.			(1) Some sort of paper product was used on the repair to the precipitator insulation during the turnaround. This is what cought on fire.	(1) K900 - Variable transformer fallure, (2) K900 - Possibly bed TEVAC cooling system performance, (3) K900 - Low power factor trip point ellowing underscaled operation (leading to high motor temp). (4) K900A - Bad order/out of spec start up timer retay, (5) K900A - timer retay was incorrect.		- (1) Not recognizing the hazard, (2) Did not follow Rt 9900 LOTO		(1) 12F11251 along with multiple other flow indicators on the FCC/Alky relief header are inoperative which prevented operations from locating the source

(1) Prior to 2006, there was no consistent practice for								
	Nt-Operational Process/Procedures - Plant Run Out/Slow Down	via lhe 200 Line. O walked the 206 was in lhe closed	Unable to get set with GHT product due to a closed valve on the 208 Line.	Near pu Loss vi	Closed	12/15/2010 4:00:00 AM	Richmond CA - Refinery	4239
	NL-Envirosmental -	C-160 over pressure causing flow to the flers during start-up	Two minor flaring evenls during start-up	Near T	Closed	12/13/2010 12:25.00 AM	Richmond, CA - Refinery	4025
(11) SOS:Dedgn & Engineering: Less Profit Opporturity: Shift (-12) heurs) Dally sil GHT, K 1670 pressure control valve wontid not allow technic to control state control valve wontid not allow technic to control state of the surface of the state of the state of the surface of the state of th	Process Safety Management (PSM)	During the 4th QI 2010 GHT Arsenic Bed Chengeout 43PV/725 TK-1670 6CQ# stem leddown controller tim was reduced to Improve control and prevent the valve from operating on its set (in short whe was oversized). During 3GHT starup on Dar. 12th K-1670 was issaled to max governor white circutelling Nitrogen. The new tim was too small to handle the steam requirements for this condition and led to -1 shift deaty to GHT starup.	GHT TK-1670 PV/25 800# steam teidown controller tina understzed	[5]	Cigsed	12/12/2010 12:00:00	Redmond.	40 19
thim change work, EWO was not revised for valve trim changes wanted. Work Group discussing the plan forward for the time change sid not question need for EWO revision or WOC initiation requirements. Work Crider was approved for Whe firm change Attempt to adjust for strommst valve condition. Valve constantly an oclass to seat causing challenge and possible failure. Old time was too big for the committee and process. Engineering: Concurrent after: Alighing Mit, Engineering, Machine Shop, Vendor & Maridian would add immediate a corrective Actions: Design & Engineering: Documentation: A Corrective Actions: Design & Engineering: Concurrent after: Alighing Mit, Engineering, Machine Shop, Vendor & Maridian would add immediate value & save time when a valuating future changes, oMachine Shop, Vendor & Maridian would add immediate within & some configuration. Overdor information not eligined with current valve trim sit configuration. Engineers & instrumentation get their specifications (VS 16 from yendor information with the original parts. This Information is rendered useless when moutifications are not insched an eliginal or the strength of the firm. This expective depends on a number of incomes such a scale used to describe the firm factors such as pressure, specific gravity, & temperature of the fluid. Scaled a number is mediated on the valve bonnotbody (from manufacturer) does not lakeyer match the outside treating stag number. Therefore, Leaching of changes of the wanter that gammer. Therefore, Leaching of changes of the vendor is rendered obsoled when calculating specific gravity at granter trail disappeared from the	Operational Process/Procedures	During the 4th Qt 2010 GHT Arzenic Bed Changeout 43PV725 TK-1570 800# steam tedows controller trim was reduced to improve control and prevent the value from parality on its east (in short value was oversized). During GHT startup on Der 12th K-1670 was tested to max governor while circulating Nilrogen. The rew trim was too small to handle the steam requirements for this condition and led to ~1 shift delay to GHT startup.	GHT TK-1870 PV/725 800# steam leidown controller tim undersized	5 S S S S S S S S S S S S S S S S S S S	Closed	12/12/2010 12:00:00	Richmond.	4100

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	4497	4399	4391	4379	4260	4258	4258	4258
	Richmond, CA - Refinery	Richmond, CA Refinery	Richmond, CA - Refinery	Richmond, CA - 4379 Retinery	Richmond, CA - 4260 Resnery	Richmond, CA - Refinery	Richmond CA - Refinery	Richmond, CA -
	12/20/2010 7:00:00 AM	12/15/2010 9:00:00 AM	12/20/2010 1:12:00 AM	12/18/2010 10:00:00 PM	12/6/2010 10:00:00 AM	12/13/2010 8:00:00	12/13/2010 8:00:00	12/13/2010 8:00:00 AM
	Cleand	Ciased	Closed	Closed	Closed	Closed	Closad	Closed
	Near Loss	Near	Loss	Losa Nosr	Loss Near	Near Loss	L Z	Near
Since 2001, Permit	Some Gops were Identified In our portable tank air permit monitering.	Who leads to motor not connected but the breaker was energized. Work was doneflaft from the S/D	Loss of Feed to GHT	Biend motors F-1 and F-2 taken off line. Could not keep fuel to line side of motors	File maker turnover record from previous date was missing	Incorectly Inactive PRD IX-803 (SISO) and Unknown Overtide PRD C5-4 (D&R East)	Incorrectly Inactive PRD IX-803 (SISO) and Unknown Overdue PRD C5-4 (D&R East)	Incorrectly inactive PRD IX-903 (SISO) and Unknown Overdue PRD C5-4 (D&R East)
Refinery's application in 2000 for VOC component Atternative Monitoring Program (annual inspection vs. querterly inspection) granted by BAAQMD in Feb. 2801. The letter received from the BAAQMD excepted the FCC Plant	A Ponsole Tank VOC abatement carbon drum inspection was missed earler hils your. A Title V Dovision will be submitted to the BAAQMD. The BAAQMD inspectors safed they would issue a Notice to Comply, (basically a warning to comect a doffiency) for this missed inspection.	Supervisor recieved a call from the Alky HO about a Motor that was put into service but was not pumping. Electrician was sent out on a station fill to troubleshoot. P-1404, the electrician found the breaker was on and the ine was no n. C/TO box, so EE proceded to the motor and found the wire leads were disconnected, energized and taped. Previuos work was performed on this equipment during the S/D.	P-171 cavitated causing C-170 bottoms tevel to rise to 100% with the fevel control value (S4LC170) also at 100% open. When the level furned around and started to drop the control value of so worked liself closed for mainfall fib sievel. When the level had dropped to – 10%, the C-170 bottoms pump. P-171, when the level had dropped to – 10%, the C-170 bottoms pump. P-171, and it is a control to the ped. This restrict it is a cost of tow of heavy gas to GHT and caused them to have to go to minimum fires. Operations were able to restart P-171 and re-establish flow to GHT 6 minutes tales:	About a hour injo steried the bland F-1 and F-2 stafed giving an atarm for # 4 bow in F-1 and the runniers were all over the board. The tank field operator was dispatched and found that when the engines switched over to line side for full comparison neither engines would keep fuel the bowls would start to drain.		PRO IX-803 was designated as INACTIVE in the Meridium database; however, when maintenance contended operations to physically remove it, we learned that it is still in service and should be designated as ACTIVE. This PRO can not be repaired on the run, and is currently overche for inspection. A separate but similar issue was demitted for PRO 53-4 in the 5475 shart at D&R East. The velve that should be on instelled in 2006 was not installed, yet the 705A page-month was approved as not forwarded to RFNAS to Meridium. Thus, the last yeld inspection is 2002, and currently overdue.	PRD IX-803 was designated as INACTIVE in the Meridium database; however, when maintenance contacted operations to physically remove it, we learned that it is still in service and should be designated as ACTIVE. This PRD con not be repaired on the run, and is currently everube for inspection. A separate but similar issue was identified for PRD C5-4 in the SH2S plant at D&R East. The valve that should have been installed in 2006 was not installed, yet the 705A page work was approved and forwarded to RFIMS to Meditium. Thus, the last valid inspection is 2002, and currently overdue.	PRD IX-903 was dissignated as INACTIVE in the Meridium database; however, when motifican once contacted operations to physically remove it, we learned that it is still in service and should be designated as ACTIVE. This PRD can not be repetied on the run, and is currently exercise for inspection. A separate but similar issue was identified for PRD C5-4 in the SHZS plant at D&R East. The warms that should have been installed in 2006 was not installed, yet the 705.4 persence was reproved and drawnated to RFMS to Meridium. Thus, the last valid inspection is 2002, and currently everation.
	NL-Regulatory Compliance Non Compliance - Air	NL- Equipment/Property Dannege - General Liablify	Operational Process/Procedures	NL-Business Process - Business Interruption	NL-Business Process - Business Interruption	RIL-Regulatory Compliance - Non Compliance - Non	NI-Operational Process/Procedures - Safety Systems	NL. Business Process
	(1) Carbon drum inspections were not managestiracted well. Why? Requirements of the regulation reparting breakthrough were not fully understood. Why? The regulation was not was misinterpreted by the Liquid Specialist. This load to the mannor in which the curbon drum inspections were managed that tidd not repulse all of the stanents were managed that tidd not repulse all of the stanents are needed for compliance assurance for BAACIMID happections.	(1) SOS: Training & Procedure (Investigations and Lessons Learned); MP1-1404 Leads found disconnected, Leads fikely disconnected between Nov 28 and Dec 15. Unable to determine who, or why, or exactly when the leads were disconnected ching the shuddown poiled. There was no paperwork real or any recollection to link to the event, threatigation stanced 4 weeks after reported fredent. Some inaccurate into on preliminary indicent lespons.	(1) P-171 slatfed to cavitate and tripped off line.			(1) Prior to 2006, three was no consistent practice for managing overthe PRD Insparedians, documenting them in Meridium, and checking the PRD 1705A and 707A forms for accuracy. Current Issue occurred prior to R1-609 being followed cornectly. An active PRD was incornedly made nactive in Meridium. A PRD that was not installed was incornedly pudded as having been replaced. (2) The one-time relocative review in 2007 of 705A forms did not go back beyond 2004 to eatch every discepancy that was entered into Meridium. Similar Issues are suspected for the period from 12001 to 12004, Since 2006, R1-509 processes to correctly menages and update PRD Inspection into have been in place.	(1) Prior to 2006, there was no consident practice for managing awardes PRD Inspections, decumenting them in Maridium, and checking the PRD 705A and 707A forms for accuracy. Current Issue occurred prior fo RI-659 being followed correctly. An assive PRD was incurredly made insective in Aradium. A PRD that was not installed was incorrectly updated as having been replaced. (2) The consideration for the prior of the prior	keirdium, and checking the PRD 705A and 707A forms for securacy, Curtent issue occurred prior for RI-809 being followed corractly. An active RPD was incorrectly made inscribed in Merdium. A PRD that was not installed was incorrectly updated as having bean replaced. (2) The ore-time retreactly updated as having bean replaced. (2) The ore-time retreactly updated as having bean replaced. (2) The ore-time retreactly updated as having bean replaced. (2) The ore-time retreactly organized manufacture and the service of the previous form 1/2001 to 1/2004. Since 2008, RI-609 processes to correctly menage and update PRD inspection into have been in place.

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	4668	4658	4529	4529	4529	4529	4526
	Richmond, CA. Refinery	Richmond, CA Refinery	Richmond CA - Refinery	Richmond GA - Reinery	Richmond CA . 4529 Refnery	Richmond, CA - Retinery	CA 10:00:00 Refinery AM
	12/23/2010 3:15:00 PM	12/23/2010 7:/45:00 AM	12/20/2010 3-00.00 PM	12/Z0/Z010 3.00.00	12/20/2010 3,90,00	12/20/2010 3:00:00 PM	10:00:00 AM
	Cossed	Closed	Closed	Closed	Closed	COSS	Closed
	No Br	Loss	None Loss	Loss	Loss	Noar Loss	Near
	Internal odor complaint irracked down by Plank Protection to the WDS	Communication Line Severed during Excavation	Tx 65/PCC kit did rol follow presched HSE, RI 300 (clare and Rigging Practices), and did not involve operations and Electrically Qualified personnel in new critical if the para near hitension power lines.	Tx 65/PCC ift did not follow practibed H8E, RI 330 (Clane and Rigging Practices), and did not involve Operations and Electrically Qualified personnel in new critical if the personnel in new critical in plan noar hitension power inse.	Tx 65/PCC kt did not follow presched HSE, RI 300 (crans and Rigging Practices), and did not involve Operations and Electrically Qualified persornel in new critical little in the presching for the presching for the presch	Tx 05/PCO fit did not follow prescribed HSE, RI 380 (Crane and Rigging Practices), and did not involve Operations and Electrically Qualified personnel in new citical life plan near N-tension power lines.	Components'
RLOP steaming flare to V-283 @ 21:43 caused slight flare activity At North and	isternal oder complaint (mercapian type odor) off westbound wind, from Admin building, resulted in Pranti Protection called to knyestigete source. The washdown area was identified as the source of the odor. The odors were incested within the refinery. After futuhes investigation, Haz Wastel banilised that the method coming from the NYCP, neutralized acid, smelled similar to that the method coming from the NYCP, neutralized acid, smelled similar to the odor hat the westpown sump, however the Yas Funch offered in the Neutralized acid, the separation of the second complains any oddes when he had less tritined out being liberated, one of which was a Compliance - higher temperature lead from a 86S sump.	Outing excavation for the new Refinery Quarry Road Alignment Project. a 50 pair capper voice able was savived ones the starting pelnt at Ridge Raad. The cable was buried approximately 18th, deep with no indication of its localism. The savived cable was impacted by a scholician from CITC and was determined to be live, currently supplying prione communications to \$24 gaies (Rod & Ouril entry. Plant Protection has been notified and a repair ticket has been cated in.	Salting of the new Ta65, PCC Building, and steel power pole required crane and lighting arguiths. This film was strough I.2 SAY, power lines near the #1 power Plan. On Thursday, Dacember 16 a 18EE was priformed (no record found of that HSE; or action items from that HSE) to determine the safe plan of arction. At that HSE, a plan was developed that required 45043 and Yard Loop (North to be switched out and deening/zed via UEE Operations Switch Cards. On Thursday eventing, a communication was put out to UEE Operations and the Project Managament team that detailed the work plan for the lift to be executed on Wednesday, December 21. The HIM for TX65PCC was associated on Wednesday in the ATSE was used and no lines were deening/zed Operations was not informed or consulted in this change.		Salling of the new Triss, PCC Building, and steel power pole required crane and figging systelfies. This fill was account of 25 My power lines near the #it power Penn. On Thursday, December 1 6 a HSE was performed (no record count of that HSE or action lieras from that HSE) to delarmine the sale plan of action. At that HSE is plan was developed that required 450x and Yard toop North to be switched out and deen regized via USE Operations. Switch Cards. On Thursday eventing, a communication was put out to USE Operations and the Project Menagament team that detailed the work plan for the fill to be executed on Versionsday, December 21. The HI, for TXSAPPCC was a secured on Tuesday, December 20th. A different Hit procedure than was discussed in the HSE was used and no lines were deen regized. Operations was not informed or consulted in His change.	Isating of the new Tasis, PCC Building, and steel power pole required cane and riggling experies. This life was account 2.5 My Downer libes hear the #1 Power Plant. On Thursday, December 18 a HRE was performed (no record found of that HRE or action liens from that HRE) to determine the sete plan of action. At the HRE, a plan was developed that required 450-3 and Yard Coop North to be switched out and deeningized via URE Oppositions Switch Cards. On Thursday eventing, a communication was put out to URE Opensitions and the Project Versagement teem that dealed the work plant for the lift to be axecutised on Versionsday, December 22th, he fill for TXES-PCC was axecuted in Tuesday, December 20th, A different Rit procedure than was discussed in the HRE was used and no lines were deeningized. Oppositions was not informed or consulted in this change.	I tom the program to reason summon at one when the NOV issued by the November of the BACAMO on 122 (170 a legate out Atternative Monitoring program implemented Compiliarce - Non since that date has enrarily included the FCC. Compiliarce - Air
	NL-Regulatory Compliance - Non	Equipment/Property Damage	NL-Injuryillness -	NL. Paulpmant/Property Dernage · Equipment Dernage	NL-Injury/litress -	NL- BenjpmenVProperty Demoge - General Leability	Compliance - Non Compliance - Air
	(1) Why ware there odor complaints regarding washdown station activities? Because the officeding of thish temp, material into the washdown station after other othereds itsely contributed to liberating the odors Why? Because the drivers did not notice there were any odors when they officeded the downward side of the washdown station area and high downward side of the washdown station area and high temperature leads had not been a requirement for the drivers and not other acquirement for the ordinary and one predous complaints were known to have been registered as a result or semplaints were known to have been registered as a result or shape particular activity at the washdown station are solved to the contributions.		(1) Because of the heefed discussion, operations, construction, and safely personnel did not get involved with the decision to proceed with the fit. (2) The project manager rushed into addressing the situation without slepping back and insuring that all the appropriate personnel were contacted and made everies of the changed in plant, (3) This liem entered by mistake, (4) Biggs should have but did not, obtain a general work permit prior to placing the crane and truck / trailer for the kin.	(1) Because of the heated discussion, operations, construction, and safely personnel did not get involved with the decision to proceed with the first, (2) The project manager natived into addressing the situation without slepping back, and insuring that all the appropriate personnel were contacted and made waves of the change in plane, (3) This item entered by militate, (4) Bigge should have but sid not, others a digeneral work permit prior to pleching the craine and truck / trailer for the sit.	(1) Because of the heated discussion, operations, construction, and selely personnel did not get involved with the decision to proceed with the fit, (2) The project manager rushed into addressing the situation without stepping back and insuring that all the appropriate personnel were contacted and made aware of the change in plans, (3) This liem entered by mistake, (4) Bigge should have, but did not, obtain a general work permit prior to pracing the crane and truck / trailer for the site.	(1) Because of the heated discussion, operations, construction, and sately personnel did not get involved with the decision to proceed with the lift. (2) The project manager rushed into addressing the situation without stepping back and insuring that all the appropriate personnel were confacted and made aware of the change in plans, (3) This liem enleved by mistake, (4) Bigge should have, but did not, obtain a general work permit prior to placing the crane and huck / trailer for the lift.	

	5217	5177	4942	4847	4847	4847	4847	4804	4695	4694	4694	4694	4693
	Richmond, CA - Rafirery	Richmond. CA - Refirery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Ratinary	Richmond, CA - Refinery	Refinery
	1/4/2011 12:00:00	1/4/2011 1:04:00 PM	12/29/2010 10 00:00 AM	12/28/2010 10 46:00 AM	12/28/2010 10 46:00 AM	12/28/2010 10/46:00 AM	12/28/2010 10 46:00 AM	12:27/2010 12:00:00	12/24/2010 1:40:00 PM	12/20/2010 10:00:00 PM	12/20/2010 10:00:00 PM	12/20/2010 10:00:00 PM	11:43:00 PM
	Closad	Closed	Clased	Closed	Clased	Closed	Closed	Closed	Closed	Clased	Closed	Closed	Closed
1	Loss	Na ar	Loss	Noar Loss	Near Loss	Neer Loss	Loss .	Near Loss	Near Loss	Loss		Loss	Loss
	Forkiift - B7 has scuff mark on left triar corner .	Excess C3 flow to FCC flare tripped totelizer	Expired Cal Gas used in 50A1600A	The safely latch which holds Gate 101 in the open position is missing.	The safety latch which holds Gate 101 in the open position is missing.	The safety latch which holds Gale 101 in the open position is missing.	The safety latch which holds Gate 101 in the open position is missing.	Spil and 18pit hit with HC in the feed causing upset at SRU's	blend was inadvertly set to secondary tank white blending primery tank	vapor analyzer needed reseting	vapor analyzer needed reseting	vapor analyzer needed researg	sight fere activity
	Forklift - 87 has scuff mark on left rear corner due to contact to an object in dumping area	The caustic in V-262 (Propana Gaustic Treating Vessel) needed to be dumped and charged per Job Mid #FCC(068). If the outside operator want out and stating to perform the steps in this task. The dumping process calls for the operator to fully open a 2° black valve on the dump line to V273, followed by "threttling" open the secondary block valve to control the flow to V253. The block valve was uponed too fer for indicators in the fled to Judge flow) sending snough C3s out of V203°s veril to the flare to floatites.	We used an expired Calibration Gas in V-35 50At800A from 12/12/2010 until 12/29/2010	The safety latch which holds Gate 101 open is missing. Gate 101 is the train gate which is located near the Gate 31 entrance to the refinery. The purpose of this latch is to secure the gate in the open position while the train is passing that. This then allows the officer who is assigned to open the gate to stand clear of the gate and the moving train which is passing, On previous occasions these alaches have broken and the gate had more dinto the path of the passing train causing extensive damage to the gate itself.	The astery letch which hidds Gate 101 open is missing. Gate 101 is the train gate which is located near the Gate 31 entrance to the refinery. The purpose of this latch) is because the gate is the open position while the train is passing that. This then allows the officer who is assigned to open the gate to stand clear of the gate and the moning frain which is passing. On previous occasions these slaches have broken and the gate had model into the path of the passing train causing extensive damage to the gate let.	The safety lelch which holds Gaite 101 open is missing. Gaite 101 is the train gate which is located near the Gaite 31 extrance to the refinery. The purpose of this lacks is so excern the gaite in the open position while the train is passing that. This hen allows the officer who is assigned to open the gate to stand than the passing that which is passing. On praylous occasions these statches have broken and the gate had modeling the passing that causing extensive damage to the gate lated modeling the passing train causing extensive damage to the gate lated modeling.	The salety latch which holds Gate 101 open is missing. Gate 101 is the train gate which is located near the Gate 31 entrance to the refinery. The purpose of this latch is to secure the gate in the open position while the train is passing that. This then allows the officer who is assigned to open the gate to stand clear of the gate and the moving train which is passing. On previous occasions these latches have broken and the gate had moved into the path of the passing train causing extensive damage to the gate itself.	Bpit and tight go! Nt with HC in the feed causing upset at the SRU's	Operator was asked to set bend from the bottom earing to the top on T-1688 since the blend was showing a heavy gravity. The S.P. Hill operator set the lines and don't notice the valve he set to the top was open on 1897 it. Approximately 7M bbis was sent to 1687 it.	Vapor analyzer for the vapor recovery system in both 3 was out of rangs when shutdown for the provious ship and could not be started until it could be reset by an instrament person.	Vapor analyzer for the vapor recovery system in both 3 was out of range when shuldown for the previous ship and could not be started until it could be reset by an instrument person.	Vapor analyzer for the vapor recovery system in both 3 was out of range when shudown for the previous ship and could not be started until it could be reset by an instrament person.	action identified to regulate staam flow when staaming out RLOP EOM writer natified of corrective actions needed.
	Equipment/Property Damage	NL-Regulatory Compliance - Permit	Regulatory	NL-Qualiy - Paperwork Incorrect/Not Sent	NL- Equipment/Property Damage - Equipment Camage	NL-Quality - Product Quality (Int)	NL-Regulatoy Compliance - Non Compliance - Water	NL-Operational Process/Procedures - Plant Run Out/Slow Down	NL-Business Process	NL-Business Process - Demurrage	Business Process	NL- Equipment/Property Damage - Equipment Damage	Plent Run Out/Slow Down
		(1) Operator Error	(1) Leck of Skill or knowledge , (2) Leck of Inadecuate Procedures						(1) Line to T1987 fill was open when operator switched the swing on T1688	(1) Didn't understend detaits of new installations	(1) Didn't understand details of new installations	(1) Didn't understand details of new installations	

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	5304	5304	5286	5279	5256	5245	5244	5236
	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmend CA -	Richmond, CA - Refinary	Richmend CA - Refinery	Richmend CA - Refinery	Richmend CA - Refinery	CA - 5236 Refinery
_	1/6/2011 10:00:00 PM	1, 16/2011 10:00:00	1, 11/2/2011 1, 0:45:00 PM	1/6/2011 8:15:00 AM	1. 1/5/2011 6:00:00 PM	12/22/2010 2:00:00 AM	, 12/26/2010 12:00:00 AM	2:00:00 PM
-	Closed	Closed	Closed	Closed	Closed	Clased	Closed	Closed
-	[08]	Loss	L N. S.	Loss	Negr	Near Lass	Logsa	Near
	sampe Ignited in fash unit	semple ignited in flash unit	North hook at betth 4 failed and released two wassel mooting lines	EE waiting hil a spoke in a Valvo Wheel	Loss of C-810 level	Sulfur Analyzer plugging problems	HSFO from T-1506 was high in Al+Si and loaded onto barges	without sampling to 1459 tk (High Sutter)
	Mislabolad gasoline sample as diesel ignited in PM Flash unit, damaging unit. Operator swinguished fre with extinguisher.	Mildabaled gasoline sample as diessi ignited in PM Flash unit, damaging unit. Operator eximquished fre with extinguisher.	As anomal for the beginning of each shift walk the wharf and chock the mooting lines and the alignment of all the leading arms. Lipput afform. I want is sense the wassola ascult spring lines if lying stack on the wharf platform. I want upartite and checked the vessel slignment with the leading arms. It is personal to the sense of the wassel moved about two feel earth. I requested the bonth Operator to norm he wassel to lighten their south springs lines and to watch for any additional movement of the vessel. I then returned to the control room. About 30-45 inhuses later I called betth 4 to see if the wassel that all their lines was ealing and upon completion they would lighten their lines. The betth Operator indicated the vessel and not export completion they would lighten their fines the vessel called on the red on and requested we wait until after they complete the vessel called on the set 4 them to and requested whe wast until after they completed their discharge to the 1st shorte land, began their discharge to the 1st benth Operator and the fines where now light. The vessel completed their discharge to the 1st plante was the now line and that have knew a burjen in the value. I requested the vessel stage the short of the short provided their fines where new light. The waster completed their fines and the provided their their provided their discharge to the 1st shorte waster the their provided their fines are shorted the vessel stage to the provided their their provided their fines and their their provided their provided their their pro	EE walking hit a spake in a Valve Wheel. The EE was walking thru a narrow walkinay. The Valve wheel has spakes beyond the wheel itself. The EE was writing and walking at the same time.	C810 lost liquid lavel. Both L1's decreased at the seme line but are either inclications of plant upset were wisiable, it locked like 810 was putting but DP's and upper feet per did not indicate such.	Sufer Analyzer at gasoline blender started plugging because of the injection unive which failed during a blend causing suffuer to fluid blend system.	After lifts on 1926, and 1927, sample results of Al+ SI in the HSFO on the Washington Voyager (210 PPM) and Drakes Bay (148 PPM) came back high. This makes il difficult to bland the HSFO.	campling raising the sulfur level in that tank which when used as a blend component threw off the tank spec.
	Fre/Explosion	Equipment/Property Damage	NI. Beulpment/Property Dennege - Equipment/ Dennege	ไกรุ่นกูฟิทิกธรร	NL-Quality - Product Quality (Int)	NL-Quality - Product Quality (ini)	Quality	- Business
	(1) SOS: Dastign & Erginearing: Sample Ignited, Gravity Results Not Checked: Procedure Not Followed: Operator Was Exitra Busy. Craw was a Minimum, so working two rooms. Operator on vecation and no overline was scheduled. Was scheduled to teld tille fuck run., (2) SOS. Training & Procedures: Sample Taga Vitere Switched (Dieses and Gascrine). Unable to Delamine. BSS Operator May Have Switched the Tega When Delivering to GOD. Discussing Samples with GCD Operators. CCD Head Operator May Hewe switched the Tega while breating down the Samples. Discussing Samples with Operators. Procedure Factors: Sample Opinied. Bettles and Samples to No. 19 SOS: Personal Protective Factors: Sample Opinied. Bettles and Samples Look Aike.	(1) SOS: Design & Engineating: Sample Ignited Grawlly Results Not Checked. Procedure Not Followed. Operative Was a Minimum, so working two rooms, Operator on vecation and no overlime was scheduled. Yas scheduled to take the truck ran, (2) SOS: Training & Procedures: Sample Tags Waro Swiched (Diesel and Gasciline), Unable to Determine. B&S Operator May Have Switched the Tags Whon Delivering to QCD. Discussing Samples with QCD Operators. QCD Head Operator May Have switched the Tags who to brooking down the Samples. Discussing Samples with QCD Operators. Proceedings and other Districtions, (3) SOS: Personal Protective Factors: Sample University Sos Personal Protec	((1) problem with the equipment tocking mech	(1) EE was walking and writing at the same time	(1) SOS: Maintenance & Inspection: C-810 Leas of Loval Indication. Both Level Indications began unparaliel tracking. Flow changes during a strutidewn can offset the calibration. Calibration of LI's is not verified after a shuddown. Not normally done for frogotten). (2) SOS Training & Procedures: C-810 Loss of Level indication. Both Lovel indicators began unparaliel tracking. Water fixes thines on LI's least are left open during shuddown to help process excess water.	L	(1) investigation learn was not able to pinopoint how the FCC catelyst made its way incli our T-1606 HSFO tank. Once the issue was found, all other tanks and rundown lines were compoed, and all were on apec. As a result, Ops planning will add frequent sampleg on callering HCO, and other oil during FCC stant up to its 2010 Cracking TIA tessons learned.	

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	5529	5520	5487	5487	5 4 8 2	5442	5348
	Richmond, CA -	Richmond, CA - Refnery	Richmond, CA - Refnery	Richmond, CA - Refnery	Richmand,	Richmond, CA - Refinery	Richmond, CA- Refrieny
	9/25/2010 5:00:00 PM	1/11/2011 2:00:00 AM	1/11/2011 10:00:00 AM	1/11/2011 10:00:00	7/7/2011 11/20:00 AM	1/11/2011 1:52:00 AM	1/7/2011 3:15:00 PM
	Closed	Closed	Closed	Closed	Closed	Closed	Closed
-	Loss	Near Loss	Loss	Loss	5	[0.88]	Loss
	IPS Rekey #2030005 South Isomax MEA pump P-332A unexpectedly shutdown resulting in a temporary loss o	F-1500 furnace HNC RLOPF/G chop	Irritation to left eye caused by wind blown dust	Initiation to left eye caused by wind blown dust	Oh (ssue)s) lead to missed quarterly Rop. B-18 inspections	P-1453 shukdown with	Gale 121 damage
IPS Rekey #2030270 At about 1000H. P1845 is observed to be gassing off	IPS Rekey #2036005 South Isomes MEA pump P-332A unexposedly shuddown resulting in a temporary loss of ~ 70mmscdf of hydrogen product. The motor was electrically isolated and tested on e9272016 by Gerald Noman. Tax results indicated grounded windings, Upon visual inspection, there were no signs of water influsion or motisture damage. The notice space heaters were in good working order drawing about 2 ampt, and rise does confirmed by enabysit 9 amonts seafler, Keo, by this 1000 hp Westinghouse motor was tested on 2/19/2009 without any issues.	All approximately 2.00 AM the 5 board operator was eltempting to bring the Fuel Gas-air ratio back into controller along the first interess and the move let the FG valve open VERY quickly causing the FG controller to chop		Employee was in process of operating a forklift when gusting winds blew dust in employed's face.	Late first quarter 2010, new VOC components identified from Shuidown/MCC work - Early 2nd quarter, all new valves entered into LeskOAS debease for scheduling, Issue identified with oblin the placement of Intia rule (first morbhyduperter) inspection frequency) Dabbases administrator requested help from inspection.oge: (LeakDAS) support. The intel rule needed to be manually inputted with a schedule Styphonen first step needed a daily license key to activate the change. Change was made on an individual basis. 3rd coarter appears components were schoduled by the do and impected formally - 4th quarter; appears that components jumped from 2nd quarteriy gended (02) to annual inspection frequency (05) thereby not capturing a quarterity inspection on approximately 400 whes. First quarter 1/10/11 discovered missed inappealons during QA/QC of LDAR data. Local regulations negatine 5 concessition quarterly lock free inspections before compensu(e) can go on an annual inspection frequency.	At 01:52, COS received alarms indicating possible shutdown of the wash water pump, P-1453. Operators responded and found the pump down. The motor had a burning amelt. The switch gear was showing a ground fault.	and I, (Bob Kendal) was in the passanger seal. Yet were hairing a trailer showing the oil spill tock. As the truck perced through, the gale started to close dipping the back, end of the trailer. The lower frame of the gale bent slightly but there is no damage to the trailer. There was another worker there on a forkill. The previous time going through the gale the badged us through and waited to assure the gale wouldn't close on us. This time he went through and waited to assure the gale wouldn't close on us. This time he went through first and we followed.
	Equipment/Froperfy	NL-Operational Process/Procedures - Safety Systems	ใก่มาๆ/Illnอรร	NL-Injuryilliness - Contractor Injury	Regulatory	Equipment/Property Damage	Equipment/Property Damage
тим мершин балгар манадар на пред на п	(1) 1 May did the motor MP-323A fail? It felted becaused the motor windings were grounded 2 May were the motor windings grounded? They were grounded because the insufation degraded. 3 May was the motor insulation degraded? I was degraded date to possible overheading of the windings. 4 May would the windings overheading the threat case to a combination of contemination and mechanical wear. 5 May would contemination and in this case this was the original motor. 5 May wasn't this motor caenedbaked or repaired during the A.T. train March 2010 chuldwarp Planned to relief on 3/18/2009 has good results. This motor was not expected to full in 2010, Anticipated roiting H2 Treats in late-2009 and early-2010, and orcent motor test on 3/19/2009 inclicated MP-32A should be serviceable through 2010.	- (1) Move on Gas to sir railo controller caused FG controller to open quickly and chop F/G to F-1500	(1) Employee was performing normal duties in a safe manner and using at the procuritions and Proper PPE, Unexpected wind gusts in he area gaused sudden dusty condition which ended as suddenly as it started.	(1) Employee was performing normal duties in a safe manner and using at due precautions and Proper PPE. Unexpected wind guist in the area caused sudden dusty condition which ended as a suddenid guist in the area caused suddenid some condition which ended as auditenly as it started.	(1) SOS: Design & Engineering; VOC inspection missed. The database singuetten requirements had been changed from quarterly to annually for many compounents. The Database had an error in it that dight allow for normal single component; changes to be made disciply within the Polgaran, (2) SOS: Maintenance & Inspection, VOC inspection missed. There was no sel independent CD program established; (3) SOS: Training & procedures: VOC inspection missed. The database hispatial procedures: VOC inspection missed the database administrator do not fully indestend what the script was going to do., (4) SOS: Training & procedures: VOC inspection missed. The database administrator do not fully indestend what the script was going to do., (4) SOS: Training & procedures: VOC inspection missed. The database inspection requirements had been changed from quarterly to annually for many components. The wrong script had been entiesed which requisit on the script, (5) SIDEEAR: SOS: Training & Procedures: A large woleme of inputs procedures. SOS: Training & Procedures: A large woleme of inputs confibuted to lark of communication and verification. There are many sets of rules required for different classes of components and step inspection which contributes to the process.	(f) see Journal for investigation The only anomaly i found was the bip until is set to 75% of the lap of the breaker, equal to 300 amps pick up noting time, this pick up exceeds the FLA of the motor even if you labe the sender factor in account. While 13 5 years is not far off of end of life, I carnot rule out the possibility of the motor was allowed to exceed access heating of the motor was allowed to exceed access heating of the motor winding and overall shorter life apan of the motor.	(1) Knows the gate stays open for a long time and figured he would make it through without badging his vehicle

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1/11/2011 9:00:00 AM	1/11/2011 9:00:00 AM	0/20/2010 8:15:00	Rehmand, 9/29/2010 CA. 8:15:00 Refinery Avi	1/12/2011 0:50:00 PM	1/12/2011 2:28:00	1/12/2011 12:10:00	9/12/2010 7:30:00 AM	9/17/2010 11:C0:00
	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
Neer	Near Loss	Near	Loss	Near	Loss	Loss	Loss	Near
Green Card - Potential for pedestrian-forkidt accident near Cracking bus stoo	Green Card - Pelential for pedestrien-forkitt accident near Cracking bus stop	IPS Rokey # 204347 FCC frame; Brief frame schwy due to high flow from Alby relief drum V-734. Schrech being movestigated, possibly PRD (Mbg perenatury) on C1400 at Alby Flank.	IPS Rekey # 204 1084 FCC flace: fite on piping et side of flare during flare operation.	Flere gas recovery overpressure tràped FCC totalizer	Diesel Productien routed off-test	Contractor burns back of hand	P6 Rekey 2025789 18 PLANT ROUTED OFF TEST DUE TO UNSTABLE OPERATION IN C-820	9 🗢
Green Card Two employees walking near Cracking bus stop. Foxklin approached along Ociane Streel. Workers did not see forklin or vice versa. Near miss.	Ţ	IPSR Rekey # 2040847 FCC flere: Bhaf flara excludy doe to high flow from Alky relint florm Y-734. Source being investigated, peasably PTC filling prematurely on C 1400 st. Alky Plant. FVE WHY Gd "above" happen? PRO AL-1424 littled prematurely on C-1440 et Alky Plant 2. Why did "1 happen? The base or plemature lifting is unknown, investigation found that this PFO 13 the same medic (19Y-45) as a PRO which had the same modic (19Y-45) as a PRO which had the same modic PRO titled gramaturely in 2008 indexides an or replaced affect the same modic PRO titled gramaturely in 2008 indexides. A Why did "3" happen? The 2008 corrective action was to available in PRO was wramated. The PRO was wramated indicated the same was to your processor of the PRO the same of your produced registering at PROs of this type was not warranted. There was not singula exidence to prove that the model of PRD was wramate not lifting in 2008.	IPSS Retky # 2041004 FCC Rest: fire on piping at exist of fixed during flars operation. Planes were observed at ventical run of piping (motecular seal drain possible). Planes were observed at ventical run of piping (motecular seal drain kna) on the side of the fixed stack of the FCC Plane. Steam was rijected with existing to the pipe and storm that FCC chards lines? That fire was corrected a Bottom half of the pipe was missting Vhry was the line corrected and missing? Too much water from steaming out creates a circl water mix in high volume daily. Why was there steaming every day and high volume of water? The process creates hydrocarbon in the molecular seal area that drains out. Operations duty was to steam out daily which created an acid water. According to a contact engineeer working on all of the refinery flares it is not a bast practice to steam teh molecular sele daily.	PC-(1900 the recycle velve on the Flare gas recovery machines plugged slightly due to low flows in the Flare gas xyalem. When NSO sladned to depressurize R 8-510 low points the Flare gas syalem pressured up and PC-1959 appeared plugged. This is lum tipped the totalizers on FCC, SISO and NISO flares with visible flare in FCC.		Contractor was working at 2A separator stearning a portable tank for cleaning purposes. A "1 separation to see recibilities," was compacied with 7 camfocks to the lask fill file a but before noon the contractors arrived back from bunch and shut the steam of to the sink. About five to ten movules tailer the contractors than proceeded for remove the attent inn from the out. When they disconrected the fillings that condensate splish steed out onto our of the contractors. The hot comdensate socked thrut the back of the conflictions gloves and burned him. He immediately reported the incident to his supervisor and the Chavorn free years and find.	IPS Relay 2023/98 8 PLANT ROUTED OFF TEST DUE TO UNSTABLE OFERSTION IN CASO 1258/2010 09:86 - RLO P18 Plant was routed to let no hops Sebelum results, Teed composition change impacted column polities, NH2 concentration sites 1, feed reduced and adjustments were made on NH3 stipper to compensate for higher INI3 concentration.	and this indiated fluctuation of flow swinging from 0.160 bph. As a result of this fluctuation, C1820 operation was affected 19 jains in his bed fauser as discy with F-1845. HH3 scrubber productifratus comp Cavitating and losing flow. CBDDBitens it has flushed the scrubber extra of the problems the higher emmonia content in the system may be the cause of factor in F-1845 cavitating and fosting flow directly affecting C-1850 pressure and country in the problem of the problem of the problem of the higher emmonia content in the system may be the cause factor in F-1845 cavitating and fosting flow directly affecting C-1850 pressure and country flower.
NL-Transportation - Company	NL-injury/lihess - Contractor Injury	N. Regulaloy Compliance - Non Compliance - Air	Firef≅xplosion	NL-Operational Process/Procedures - Safety Systems	Ouesty.	Injury/Miness	Quality	NL-Quality - Product Contamination (Int)
		(1) Replacing all PRDs of this type was not warshted. There was not enough evidence to prove that the model of PRD was the cause of the PRD lifting in 2008.	(1) Operations was doing a routine duty daily of steaming the flare which caused a airge arrount of condensate and fiquid to build up at high volumes. The flaud due to the presence of sufur created an acidic environment. The low pH caused correstion of the pips., (2) Operations was doing a routine duty daily of steaming the flare which caused a single arrount of condensate and flaud to build up at high volumes. The liquid due to the presence of suffur created an acidic environment. The liquid cause to the presence of suffur created an acidic environment.	(1) Low flows to FGR caused plugging on the PC-1050 Recycle valve and subsequent poor pressure control	(1) Lack of communication between STL & RSL.	(1) -Why did the contractor get burned? -Because hot condensate scaked thru his playes onto his skinWhy? -Because the confiredor-was not wearing the proper type of glows to protect from a spleach hazordWhy? -Because he didn't think these was poing to be any spleath hazord to the concerned withWhy? -Because previously the confractor had not seen hot confered with a was poing to be any spleath hazord to the concerned withWhy? -Because previously the confractor had not seen hot confernation in the fire when disconnecting the fittings.	(1) Increased ammonia feed concentration of the sour water feed. OVVS could not reconcile colum inalegiby was cause by NH3 % in feedincessed ammonia feed concentration of the sour water feed. OVVS could not ecognize column instability was due to increase NH3 % in feed.	(1) Pressure problems in 18 pli NH3 scrubber section caused pressure accuration in C-1820.

	5725	5710	5710	5710	5710	5707	5706	5700	5699	5631	5620	5620
	Richmond, CA · Referency	Richmond CA - Reinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinory	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmend, CA · Refinery	Richmond, CA .	Richmond, CA - Refinery	CA - Refinery
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	Closed	Closed	Clased	Clased	Closed	Closed	Closed	Closed	Closed	Ciorad	Closed	Closed
	Loss	Loss	Loss	Loss	Loss	Loss	Loss	Near Loss	Loss Negr	٠ <u>٠</u>	Loss X#81	Near
	Knee injury from trip in grass area	sample pods over filed spitting 1/2 bit of JP-8 to collection basin.	sample pods over filed spilling 1/2 bit of JP-8 to collection basin.	sample pods over filed spilling 1/2 bit of JP-8 to collection basin.	sample pods over filed spilling 1/2 bit of JP-8 to collection basin.	Shop and Pipe Street Feeder Fellure	Tripped totalizer, 102 scf	Tripped totalizer, 102 scf	Cracked window on the Cherry Picker while moving gangway	Recov Oit Spill < 1/2 bbl to Asphalt in Haz Wasie	Green Card - Potential for pedestrian-forklift seedent near Cracking bus stop	pedestrian-torkilit accident near Gracking bus stop
The Richmond, the Washington Voyager discharged 128 MB of HSVGO (V1993) and loaded back 100 MB of ULSD and 63 MB of HSFO (V1964).	While investigating power failure at #1 Substation operator tripped on some wire fencing that was hidden in the grass and landed on his left knee causing a scrape.	A hours after starting to load JP-8 on the wassel Evergreen State the operator making his rounds found the sample pode were ful and had started spilling over fails it is sample box.	A hours after starting to load JP-8 on the vessel Evergreen State the operator making his rounds found the sample pods were ful and had started spilling over into the sample box.	4 hours after starting to load JP-8 on the vessel Evergreen State the operator making his rounds found the sample pods were ful and had started splitting over into the sample box.	A hours after starting to toad JD-8 on the vessal Evergreen State the operator making his rounds found the sample pode wore full and had started spilling over that the sample box.	Doubled orded power to 1A Separator and the EOD Centrel House is supplied by two 3-bay 12kV switches, TX-437 Bay Group and TX-438 Bay Group. Electrical fault initiated in 12-353 Switch for TX-438 Bay, We see evidence of 12 KV tracking between the A, phase pus ter, elong the installing micental board, to the shoet mellal. Once the all reseme lowface for phase to ground fault escalated into a 3 phase fault. There is a small air space at the top of the 45-3-bay 12 kV switches where they connect together. The lonized bir traveled from the TX-438 bay group to the TX-437 Bay group and caused a 3 phase fault there as well.	Preparation for Ponhox tlart up, operator conducting pressure chieck on nearly replaced REVs. Prior to depressuring, outside operator notified board operator both K-242/257 running, 53% loaded Opened yalve to relief, pressured up, board operator unable to load up compressive. Iripped totalizer to 2 cm	Preparation for Penhex siart up, operator conducting pressure check on neenly replaced SEVs. Plot of depressurating, octained operator notified board operator both K-242/252 running, 53% loaded. Opened yelve to relief, pressured up, board operator unable to load up compressure. Tripped idealizer 102 set.	Backing out a Cherry Picker white rainswing the gangway from inside the area were the larger gangway was parked the operator miejudged the disclance he had to dear the area and side window came in contact with the corner of the larger gangway causing it to crack.	Contractor spilled < 1/2 bbt of recovered oil to asphalt surface in Haz Weste Armax Proceeding Area. During transfer of recovered oil between pertable lanks it was discovered that a "14 turn ball withe bleeder was created pen, causing oil to teak out of the transfer like and ordo like funk and nearby asphalt. Naterall sneede on puddles from previous day's rain, moving under and around portable tanks located in immediate eres.	Green Card Two employees walking near Cracking bus stop. Forsiti approached along Octane Street. Workere did not see forbilit or vice verse. Near miss.	approached along Octana Street. Workers did not see torkint or vice versa.
	trjury/illness	NL-Business Process - Business Interruption	Nt-Environmental • Operational Leak	Business Process	Environmental	Equipment/Property Damage	NL-Regulatory Compliance - Permit Exceedance	NL-Lessons Learned	Nt. Equipment/Property Damago - Equipment Damago	Environmentel	NL-Trensportation - Contractor	NL-injury/filness - Employee injury
	(1) Wire located in grass	(1) This is a new system and put its service with minimum training. Operator misunderstood the operation and operate it the flush valve on this system which bypassed the in-tire pump and allowed full flow from the 16" jet to the sample pools.	(1) This is a new system and put is service with minimum training. Operator misunderstood the operation and operation the flush velve on it is system which bypassed the in-line pump and allowed full flow from the 16" jet to the sample pods.	(1) This is a new system and put is service with minimum traking. Operator misunderstood the operation and operade the flush valve on this system which bypassed the ri-line pump and allowed full flow from the 18° jet to the sample pods.	(1) This is a new system and put is service with minimum training. Operator misunderstood the operation and oppened the flush valve on this system which bypassed the in-time pump and allowed full flow from the 16 ¹ jet to the sample pods.	(1) Space heat Inermostat set too low				(1) Malarial teaked from an open bleader line when the handle on a X ium bell valve bleader was inadvertistly bumped to a partially open position. Why? No piug was natiated in the open end of the bleeder line. Why? The piugs available for use are for throaded connections, and the bleeder line had a "Thor" coupling installed for which there was not a piug evallable. Why? The Thor coupling is used to connect to plant compressed air when desarring the cargo hose after transfer. Ther coupling was left in piace on the bleeder between uses of the cargo hose for material reastions. Why? Thor coupling had been in the past (will only valve for protection) without plugs installed, yet no incidents had occurred.		

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	5777	. 5740	5734	5726
	Richmond, CA - Refinery	Richmond, CA -	Richmond, CA - Refinery	Richmond,
	9/6/2010 2:10:00 PM	1/16/2011 7/18:00 PM	1/16/2011 12:00:00 AM	12/30/2010 12/30/2010 12/30:00
	Closed	Cibsed	Closed	Chased
Section of the sectio	Near	Coss	Near L033	L033
	IPS Rekey #2022359 At Approx. 12:15 K-1400 started surging.	DHT feed pump P-1001 rip due to low from DSL teil line off fest	V-340 CO sample check missed	High H2S on USLD lift oo
IPIS Reby 2039228 TOP INVESTIGATION-DUMPSTER FIRE—At approximately noon on September 27th, 2010, a small smoldering are was neigad by two amphyses from the Machine Shop. They had noticed a burning smell and then neigad a dark plastic bag smoldering inside a large clean trash, dumpster (wood, paper, food waste, ok) cleared united or the Machine Shop. The amployees quickly entered the Machine Shop and respected what they saw to their truperviser. The superviser along with the employees walked back of the trash bin (just a minute after) and noticed that the fire had gotten böger inside the bin and flames were now wistle at the log of the bin. A third remove quickly grabbed a fire exhiputifiest to put out the flames with the series of the control of the schowers for the providing the bin with fire water. Once the fire was extinguished, the fire by Prooding the bin with fire water. Once the fire was extinguished, the materials were moved a count findle the bin with a sick to throughly permeate them with a small amount of class A noam that was also added (Class A Clasm is used to penetrate wood, paper materials). They sick see the plant to vertilate the Machine Shop Area and the sine, was varied including perper, styrotom cups, other plastic material and the time, was varied including perper, styrotom cups, other plastic material and plage, etc. All considered clean trash. There was also a postassional-type	At Approx. 12:16 K-4000 stated surging. At approx 14:10 the compressor stated surging to the point of NEAR compressor SID (lune oil control oil header LOW statem sativating numerous finase but not inggering the LOW LOW studied to a faulty governor, coupled with the high heat of the day, the Compressor surge is impossible to a low who the armong a "Kelly Coeler" of continuous utility water spray over the governor, to keep it functions.	increasing the 3 cut product from the 4 Cruste until occurred. The FCO was increasing the 3 cut draw reals from 22.348ED postularly whis as ingressized of 2548ED, as directed by the RSL. In order to accomplish this, the local but make that to be reduced somewhat 3 out allecut stipper fewel (1102-030) was approximately 65% and Increasing at this time. In addition to bear process moves during this time frame the find just completed a V-102 poster moves during this time frame the find just completed a V-102 poster from V-103 that process. The recovery process always loads up the C-1103 Flash Oran, With the 3 cut of draw rate at 2.3 MSID. The CPCO opporter cod a lotal and compite to column with additional flash vapor want from V-1103 Allest Oran, With the 3 cut of draw rate at 2.3 MSID. The CPCO opporter of a lotal and compite to establish the coduct from the first of the compital an intermediate jump soution improvement. This draw controller remarked the controller for each shallshit the coduct flow. The 3 cut flow the reased from zero to approximately 13MED and within a short line spen the flow increased of the draw process the stipped specially the coduct flow. The 3 cut flow the coduct of the compite for each pump P-1601 immediately that down with a less of 3 cut draw process. Atter each pump P-1601 immediately that down with a less of 3 cut draw process and sideout strippe in right were loved to vessel of the standard and stripped right were loved to vessel of the coduct strippe in right were loved to vessel-of storage stark.		discharge and load operations occurred without any issues. A vessel composite sample of the ULS2 atter load rendered results that infaciled the product to be on-speci. Julying muther tank atmosphere inspections on 12/26 (\$\frac{1}{2}\$) (\$
	NL- Equipment/Property Damage - Equipment	Едифилеп∜Freperty Damage	NL-Quality - Paperwork Incorractified Sent	Algano
(1) TRAINNO & PROCEDURES (COMMUNICATIONS); Verled incompetible/fiammable material found/dumped into	(1) SOS: Maintenance & Inspections: K-1400 Compressor Expenienced Speed Swings. Speed Swings were between 500-500/RPM dring the incident. Controllute Turbino Cil Alarnts activated. Oil in governor became evenheated from direct expectant is sun. CHELTRON 46X Oil (new cit) may not be viscous enough for this equipment.	(1) Plugging in the 3 S/C region of C-1100 limited the amount of 3 S/C that could be pulled out of 4 S/C. This limited availability on the tray end contributed to being favoin C-1120. The plugging in this section is due to the metal being carbon slets when't would normally be stailless steel based on sulfur content and temperature. (2) There is a suspected loak in the 3 S/C draw tray sump but was domitted in a later genma scan. The true rook cause of this teek cannot be identified until the content is entered during the upcoming major shutters.	(1) inadequate procedure, procedure needs update	(1) No procedure to address a CU strb result greater than 1. (2) Do not have an approved HZS scavenger for use in Richmond Diesel

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PM	1/20/2011	1/20/2011 2:45:00 PM	1/20/2011 7.05:00 AM	1/15/2011 12:45:00 PM	1/18/2011 6:30:00 PM	1/13/2011 12:00:00	1/12/2011 10:00:00 AM	1/17/2011 11:10:00	1/17/2011 9:05:00 AM	9/27/2010 12:00:00 PM
Closed	:	Closed	Closed	Closed	Cio se a	Closed	Closed	Closed	Closed	Closed
Coss	Neer	Loss	Near	Loss	LO SS	loss	F035	Near	Kear Kear	င် ဖွ
H2S Monitor alarmed	_	Nausea while grinding inside F-2303	Loss of boller feed water to	Flaring during depressuring of the LNC	mp501b look off 1st flango discharge side	Offices Diesel Wear Scar	TX-380 Vollage Drcp From Starting P-36	H2S Monitor Activations	Scratch to upper right lip when struck by falling scrap metal.	IPS Rekey 2038228 TOP INVESTIGATION:. DUMPSTER FIRE
returned to work	JVI - Cutting in F-2303 when H2S monitor want off. 28PPM EE felt fine and	. IV.! EE was inside of F-2303 grading when he stated to detect odors inside his nepitatior. He stopped work and proceeded to exit line equipment, and became nestreous during this time. Due to the noise halde caused by the work he was performing, was unaware that his F2S Monitor had also activated and save a peak of 48 ppm.	In the process of isolating T-1689, boiler feed water to FCC was tost. The boiler feed water tank and the prodution from the RO plant was both blocked to FCC.	During and attempt to depressure the LNC during a shuldown of the plant, flate Gas Recovery overpressured and a small films was observed at the RLOP flare.	OPS Initially discovered teak on 1/15. On 1/18 leak appeared to increased dismatically. Decision was made to swap feed pumps at that time	A Diesel Cargo with an offspec wear scar was relesed from Richmond Long what	While being fet by TX-890, P-38 was started. Stefring P-36 caused a voltage drop in the electrical system which in turn lipped the Long Warf Emmastion Reduction Device for tip eff-line. Ships are unable to lead or unload when the Long War Emission Reduction Device is not in operation.	Varolus, (Chev., JVI. Biggs, Westeen)HYSS Monito, Activations, claring planned maintainence edivities. Two conflict valves were being removed for repair and equipment stoleton, using breathing are equipment. At the start of the job it was feggy and calm what conditions, but after a short period of time the wind started to thow South (lowed the crane) being used for the job and the standby crew, Vrhen the conditions changed, a short time later (10) HZS monitors activated ranging from span to two monitors registrating <100ppm, All effected workers were oftened to be examined by EMTs which was declined, with all of them stating that they all felt fine. Two Of the lan monitors were stilling outside the areas and belonged to the how workers in breaking are performing the work being done. Monitor readings were included for date only.	After drilling a hole in the suspect of a feel high elevated deck, the employee tracked up to grab the edge of the deck to pull himself out from underneath. When he grabbed for toe-board of the deck, he materially knocked a place of scrap angle iron off the deck. As he was tooking up, the scrap metal till the fight after this stately glasses and then scratched his upper right lip as it onlined to the stately glasses and then scratched his upper right lip as it scratch in the lens of the stately glasses drectly above and in tine with the scrap had left a scratch in the lens of the stately glasses drectly above and in tine with the scratch on the lip.	clearing agent in an ecrose can among the debts, along win a couper or pair of letther work gloves. Notes: Uning the investigation, it was found that personnel from other eraes also dump their debts in this bin: the Richmond Transportation Department (RTD) and the Gasciline Pump Area. It is also accessed by some contractors to dump some of their debts when around the Machine Stop or RTD areas. It was found that normally the Machine Shop uses clear placific begin in their wastebaskets (totes). And RTD uses black plastic bags in their wastebaskets (totes).
Contractor Injury	AL-injury/lliness -	injury/iliness	NOperational Process/Procedures - Plant Run Out/Stow Down	NL-Regulatory Compilance - Non Compilance - Ak	Equipment/Property Demage	Operational Processiff rocedures	Operational Process/Procedures	NL-Operational Process/Procedures Flant Run Out/Slow Cown	KL-Injuryllinass - Contractor Injury	Fire/Explosion
		(1) PPE Main'x	(1) \$03: Design & Engineering: Loss of Beller Freet Water to FCC. Valve was closed coming from the RO Plant. Miscommunication between B&S and Co-Gen. No Detailed Procedure, Not District think it was needed. Simple Procedure, No Drawings where to the MoC. Though I Drawings Weiert Needed Since Only 1 Valve Would Be Closed. HSE Did Not Include Other Business Voils. Felt emails to the Other Units Would be sufficient.		(1) Why old DJS flange on P-5018 develop a leak Flange had lossened Why had flange lossened - Flanged was torque and not lensioned, later found to be the preferred method. Why wasn't flange tensioned - Both methods of lightening flanges are acceptable, Preferred method of lensioning flange wasn't noted in work directions along with past issue with flange leaking. If was left up to enchance to choose which method to use to lighten flange.	(1) The investigation has determined that there is an issue with the VFD drive which is prewenting the proper feet back to the PLC system before it times out which causes the alarm. Based in these indiring is on-file support personnel will altempt to resolve the condition. The investigation teem discussed the requested additions for Wharf board operators to be obte to change the thirdity injection as ploid from the Hongwell console. Because the current communications to the injection system is day banded If would need to eliminate other parameters in the system. To remove these other parameters and sed in the requested furbridy amount change fundionally PLC code modifications will be required.			(1) in setting up for the job, the employee focused on the hazards of the job and the pipe that would be needed. The process followed created a hazard that was not recognized or was ignored as the job progressed. (2) A small job of short duration was not completely though through and employee went about the task with cont.	(LABELSYSIGNE): Current, labelski grage on trash totas and dumpser are not visible enough to raise awareness on improper disposal of meterial into clean trash, (2) SIDEBAR (SSUE-SOS; Melnienance & impedions (Melnienance)—Steam trap drien at end of platform (ground lavel) does not have a spleah guardicover to pravent possible steam firsh have a spleah guardicover to pravent possible steam firsh burn

	6405	6380	6380	5356	6313	6304	6304	0245	6243	6242	6211	6178
Richmand.	Richmond, CA - Refinery	Richmend, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - 1 Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - 2 Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery
Richmand, 11,9/2010	1/25/2011 8:00:00 AM	1/25/2011 1/25/2010 AM	1/25/2011 12:00:00	1/24/2011 3:15:00 PM	1/24/2011 8:30:00 AM	1/21/201: 12:15:00 PM	1/21/201; 12:15:00 PM	1/23/2011 6:00:00 PM	1/23/2011 12:00:00 PM	1/25/2011 3:00:00 PM	1/22/2011 4:30:00 AM	1/20/2011 7:00:00 AM
	Closed	Closed	Ciosed	Closed	Closed	Closad	Clased	Clased	Closed	Closed	Clased	Clesed
	L052	Loss	C 55 C	Coss	<u> </u>	Near	Loss 1,oss	L055	Near	L035	Near Loss	Loss Coss
Loss of Rado	Flash Burn, R-510	JP6 lesk at podsampler	JP8 lesk at pod sampler	Back Strain	Mechanic pinched linger between wrench and valve actuator white locsening ruls.	Losi A/O injection at JHT	Last A/O injection at JHT	Particle in the eye	Set wrong component to blend lank	Particle in the eye	Hel s'ag fall on a piece of rope	Failed to perform a closing gauge on T-3167
	Celelyst Services; EE was working on a inspection cover at the top of R-510 lepping holes on a 8" opening, when a phyrothodic reaction occurred. Worker was weening a breathing habries and this by twos coverells, minimizing the exposure, with minor irraliation to his neck area.	At approximately 0200hrs, the SPH Operation was making a visual haspection of the Cital Injection system and JPB pod sampler at \$7 pump station. The Operation for the country of the SPH Operator of the SPH Operator of the SPH Operator of the SPH Operator outlied the RHO and STL. Plant Profection was summoned and the task was technical. The isolation valve is underreath the 15" Jal in the evaphead ploway accessible only at the staging srected at that location. During the attempt to isolate the Jest, attempts were made to close the main valve to the pod sampler without success. "This insects to be crecked to ensure that no instrumentation was damaged prior to restart.	At approximately 0200hrs, the SPH Operator was making a visual inspection of the CLAL injection, vyterm and JPB pod sampler at \$7 pump station. The Operator of scovered that there was a moderate leak on the fitting directly above the spring loaded bypass velve for the lubing. "The spring loaded view was installed on elaythin 1724. The Operator notified the RHO and STL. Plant Protection was summoned and the leak was located. The isolation valve is underroseth that 16" Jet in the overhead pipoway accessible only via the staging executed only via the staging strength of the part	Two anochinos were moving 4x8 shoots of insufating material, the mechinos were moving the material whith in a flat position, while the they ware moving the material they meeded to edjust the material to the Up & cowin position to fit it through a door. When they adjusted the material to the new position one of the mechinics fit is put in his back. Mechinio seen at clinic and return to work with follow up in manning.	Mechanic was locenting the double 3 18" ruits on 7-501 discharge flange on the dock above the pump to facilitate lensioning the flange. One rui was sticking and the mechanic was using the wrench to remove it. The ruit suddenly funds free causing the wrench to remove it. The ruit suddenly funds free causing the wrench to pinch their finger between the wrench and 11-15008 wave accusion.	Antioxidant chemical pumps S/D on low tavel at 10% of tark volume on 1/2/1/ft @12:15Hts	Antioxidant chemical pumps S/D on low tevel at 10% of tank volume on 1/2/1/11 명 12.15Hrs	JVI - Particle in the eye. Retractory work going on though he wasn'i doing it. He was just standing there.	An Operator who returned to work efter three months and was retresting the town with the set a component tank which had been switched dwaring his time off to the gasoline bender, and it west'n discovered till three hours later when they started having problems making set points.	A. JVI employee received a pertide in his eye white carbon ending on E-2302. Employee lifted his fecantield when he was finished with the job not realizing that his air on his equipment was not completly shut off which caused dust to enter in his eye.	JVI - V/hile gouging in F -2370 a piece of hot slag fail on a piece of tope.	Falled to perform a closing gauge on T-3107 for the convience of welling to gauge more than one tank at a time. Operational neats determined a transfer to the the place of the time of time of the ti
NL-Operational	injury/iliness	<u>Environme</u> ntal	NL-Environmental - Operational Leak	ใก]บาร/ไห้กอธร	injuy/ifness	Nt-Lessons Learned	NL-Business Process - Business Interrupiion	seeulli/Anful	NL-Business Process - Business Interruption	iojuy/iliness	NL-Fire/Explosion	NL-Business Process - Business Process
(1) SOS: Design & Engineering Radio system is at a macinum expectly during Shuidowns. System updaling is overdue. (2) SOS: Trading a popeasures. During Shuidowns: Contract companies bring in periable repealers. (3) SOS: Training & procedures. Misunderstanding of radio protectly users. Personnel have a talk time of 10 seconds.	(1) Change in the process for dumping reactors	(1) The stainless steel tubing separated from the bypess views because the length was not adjusted properly attor the installation of a new spiring leaded valve.	(1) The stainless steel tubing seperated from the bypass velve because the tength was not advasted properly after the finstallation of a new spring loaded valve.	(1) The workers chenged position of the material white in motion, causing worker to strain muscle in sido	(1) (For documentation purpose) Machanio not eware of placing his finger in a pince point.	3	=	(1) improper use of PPE		(1) Face Shield was removed		

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	6552	6542	5518	9159	6506	5480	6477	6450	6445	6410
-	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA • Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmand, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	A In the same
	1/26/2011 7:15:00 PM	1/20/2011 2:30:00 PM	1/25/2011 11:00:00 AM	1/26/2011 10:15:00 AM	1/8/2011 9:00:00 AM	1/25/2011 10:00:00 PM	1/26/2011 4:10:00 AM	1/25/2011 2:23:00 PM	1/25/2011 2:35:00 PM	100
	Closed	Closed	Cossed	Closed	Closed	Closed	Ciosad	Closed	Closed	
	Loss	Near Loss	Losa Losa Losa Losa Losa Losa Losa Losa	Near Loss	Loss	Negr Loss	N-9-ar Loss	Negr Loss	Loss	
	P.713 leak on discharge	A report for a batch of CARB motor gasciline was submitted to CARB Regulators that was generated with an incorrect value for the regulated property of Arcmatics in mogas.	Randd odor release from material being pH adjusted at the North Yard Chem Pad	Damaged contractor company trailor door	P-302B diesel engine damago	JP-8 Finals of load to Evergrean State ship showed bad conditions in 88 compartments	Fire in F-2301	850 steam safety fiting in FCC	Particle in the Eye 3 SRU	
TKC Ops discovered a leak on the discharge side of MP-713 at a "threaded	TKC Ops droowered a leak on the discherge side of MP-713 at a "threaded rippe going to PS (gauge. Operator pat a steam snot on it and cated the HO who responsed with other operators. These were a block valve in front of where the leak through the leak through the leak throwever it would be awkended and pose a hazard to personnel to got to it. The decision was matted to isolate the pump suction and discharge to settly stop the teak, Good job by Ops to recognize the heazards and take actions to mitigate the heazards associated with this test.	QCD SQCO submitted to CARB a predicted model report created with an incorrect value for Accoratics, volumely. The report is an official notification of CARB of the product specification for this specific batch report is a marketiplace as CA reformulated mogas. Any inaccuracy on the report is a Product Quality risk that could lead to a Notice of Violetien being issued to the Referaby. The report has been submitted and confirmed received by CARB.	Cesulic interes solution from the FCCs shuddown, V-250, had been stored at 13 Sap lay down area. It had been interestered to the North Yard Chem Pact II was being pH oblisted for drop purposes. The Portails 500 bill face lank had been equipped with vapor centron drums to mitigate oxions from the pH adjustment operation. When the solution had reached at pH of about 10 a pronounced oxor istated conting from the work area. The contractors were not aware of an increase in oxfor due to their PET requirements. An oxfor compaint from the operations was directed to the EFC and upon his meetingsion it was determined it was coming from the NYCP. By the time it was reported that there was a problem the pH adjustment had been afriest compileted. It was there was a problem the pH adjustment had been afriest compileted. It was called discovered the other had been lesking though cracked hoses to the carbon drums. When the hoses were replaced the oxor was controlled from the fract tank.	A Curran Supervisor asked a Weltech fortiff of ver to help lift a paliet load onto his trailer. Weltech employee proceeded to put the load onto the trailer and in the trailer end to the trailer and the process drove onto to the trailer door ramp and broke if. The trailer door ramp and broke if. The trailer door/ramp was not built for such a heavy load.	while conducing monthly atarm/operaling lests at #13 separator, the area Operator rolload smoke & oit coming from P-302B cless lengine exhaust. Engine has been removed and disassembled to determine extent of damage.	Upon sambling the Evergreen State It was found that the compartments of loaded JP-8 had particulates in the samples that caused the condition tests to fait. All other tests passed.	JVI, (Wallicch: Late in the shift tanjoh we expenienced a small fire inside F-1201 which required the assistance of Flent Protection to extinguish. The JVI looks were working cutting out one nazzle and welding one pated on his South end of the juriance, Weltech had 3 ferwatch toks working with JVI. At the time had for was detacted JVI had been out of the furnace for 20 minutes willing for the his precisar loiks to earnive. Weltech was standing by for the 30 minute required pariod. Walloch observed annote coming out the North end of the furnace frought to hold the shall be	#850 sleam safely in the FCC litted during a slowdown of K-303 Why 59PC951 Was closed in the field and showing open on the board (850# steam from FCC to the yard) side note: Operations was using job aid FFNP-4820 to place K-303 to kide #1	${\cal J}VI_1$ EE was filling up a patch on R-2201, welder started grinding when EE tolt sometring bit him in the eye.	
	NL-Environmental - Operational Leak	NL-Quality - Paperwork Incorrect/Not Sent	NL-Lessons Learned	NL- Equipment/Property Damage - General Liebitty	Equipment/Property Damage	NL-Quality - Product Contemination (Int)	NL-Firs/Explosion	ML-Operational Process/Procedures Safety Systems	injury/liness	
	(1) Pump APS spool has a non welded nipple that leeked.	(1) Operator was not alerted to a measurement that was beyond folerance	•		(1) Equipment not PM'd according to OEM recommendations. (2) SOS Maintenance & inspections: P-3023 Diseal Engine Damagad. Piston ratilled around hatide engine. Push rod had come loose and fell conting in contact with piston. Bridge assembly came loose allowing the push rod to come loose. Internal preventative maintenance was not performed according to OEM.	(1) Proceedure required running mixers on T1798 and T1799 to blend tank. These mixers had not been operated for an extended person when the sedment that had settled to the bottom causting particulate in the protect., (2) 18th presidual, comparatment initial condition sample #2248928 failed with a +16 color			(1) Did not follow procedures	bagner accinentiant, sacretic accinetia.

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	7060	7060	7049	6874	6780	6780	6778	6556	6855	6611	8588	8888	6552
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2/1/2011	1/31/2011 9:30:00 AM	1/31/2011 9:30:00 AM	2/1/2011 10:00:00	1/31/2011 4:40:00 AM	1/28/2011 5:15:00 PM	1/28/2011 5:15:00 PM	1/27/2011 5:45:00 AM	1/27/2011 5:30:00 AM	1/27/2011 5:30:00 AM	1/27/2011 12:00:00 AM	1/26/2011 4:00:00 AM	1/26/2011 4:00:00 AM	1/26/2011 7:15:00 PM
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	Loss	Loss	Legs	Neer Loss	589	Logs	Loss	Loss Nam	Near Loss	Coss	Loss	Lass	Loss
	1-3076 SEAL INSPECTION/DAMAGED PRIMARY SHOES	T-3076 SEAL INSPECTION/DAMAGED PRIMARY SHOES	Truck backed of mad in main tenk field	TOP INVESTIGATION: Smoke coming from behind insulation in 1-2301	Particle in the eye	Particle in the eye	Motor yehicle arcideni	Green Card - Dangerous Oriving in Cafeteria Parking Let	Green Card - Driver(s) over-taking in parking lot	Lacarations due to fail	Pain in the back	Pain in the back	P-713 leak on discharge screwed fitting.
Green Card · Power cord from electrical outlet to a 8BQ left in walkway.	During the seel inspection of T-3076, the primary shoes seels where showing gaps in a 30 area, upon inspection it was discovered that the shoes are corrocted and out of compliance with Reg 8 Rule 5 (BAACAND) in that 30 foot area.	During the seel inspection of T-3076, the primary shoes seels where showing gaps in a 30 area, upon inspection it was discovered that the shoes are comoded and out of compliance with Reg 8 Rule 5 (BAAOMD) in that 30 foot area.	Employee was out in the main tank field looking for T-3076 tank site. Employee was in the T-234 area and realized that he was not in the correct area. The employee drove up the road and realized he was as a deal ent and proceeded to back up ~ 2 feet. Employee field he rear end of the trock side, and then the front also side to the side of the noad. The employee and passanger realized front less side to the side of the noad. The employee and passanger realized that they were in a steep angle and made the decition to said the vehicle from the different side door. The employees called their supervisor and reported the incident.	JVI - JV was wekling in F 2301 when a smell was roticed. Ops was called. Wolders eyes a terted to bern and he exited the furness. Upon exit he noticed the smoke coming from a approx. 18 in nozze on the sest side.	JVI - Particle in the eye while gouging in F - 2301	JVI - Partice in the eye while gouging in F - 2301	Contract employee guilled up behind a Chevron call that was stopped at the stop sign at the "". The cart stands to proceed by rolling forward a flow feet then stopped again. The car van behind the earl followed but failed to react when the cart stopped the second time. The van lightly tapped the back of the cart, causing minimal dismage.	Green Card Saw driver drive through gap in concrete block parking stops using the crosswalk as a roadway	Green Card While driving in parking lot by Catellaria, was overtaken by people difling around the speed bumps. This has happened multiple times (3) this week.	Bay Valve, EE was welking from the gravel int on the South side of the 2000 Plant to look at a job and tripped on some uneven asphalt along the edge of the gravel lot.	Weiltech EE thinks the incident may have happened when he was moving a walten pump during the incident the morning of the 26th. Didn't feel it then but when he wrise ploday (the 27th) sicred 2 PM he had a kille ache, it got progressively worse until he was bent overin pain.	Weitlech - EE Binks the Incident mey have happened when he was moving a weiden pump dusing the Incident the moming of the 26th. Didn't feed it then but when he wiske up today (the 27th) around 2 Phi fe had a titlle ache. It got progressively worse until he was bent overin pain.	the leak was that equid be used to iscale the PSI gauge and the leak however. It would be entweet and pose a hazard to personnel to gal to it. The decision was made to lectule the pump suction and discharge to safely slop the teak. Good job by Ops to recognize the hazards and take actions to mitigate the hazards associated with this lask.
	Regulatory Compliance	Equipment/Property Damage	Equipment/Property	NL-Fire/Explosion	NL-injury/liness - Contractor injury	ไทุ่มญู่ใโกธรร	Equipment/Property Demage	NL-Transportation - Personal Use	Nt-Transportation - Personal Use	Injury/iliness	NL-injury/litness - Contractor injury	injury/iliness	Environmentat
	(1) SPAC incomplete - No MOC information can be found when sour water was stored in the and 1990's. The investigation team assumed that there was no MOC conducted, (2) Inspection techniques a ned improvementative current large-tion program does not cover the integrity of the mechanical shoe	(1) SPAC (recomplete. No MOC Intermetion can be found when sour water was sored in the mid 1990's. The investigation team assumed that there was no MOC conducted., (2) Inspection fechniques need improvement - The current hospital program does not cover the integrity of the mechanical shoe	(1) Other knew ha was unable to see the drap off onto the indised portion of the drineway but looked over his dight stroitider and proceeded back anyway. He was also unaware of how close the right lites were to the edge of the pavement. Stop/Pause Mork Authority was not exercised. (2) Driver went up a narrow driveway at Tank 204 suspecting the could reach Tank 3016. Ho relied on hompfold menter droke and relied on an abstraviate tank field map that did not show posts. (3) Driver went to never till the realized the driveway is a dead end even though he knew he was at the wrong location. There was nothing in place to inform visitors that the driveway ands.	(1) SOS: Training & Procedures: Smake in F-2301. Chemical leadton when Dorygen entered the turnace and reacted with the suffur dust (behind refractory). Suffur it impregnated into the inflation; over the years. This happens in ALL SRU s. No written confingancy plan in place (best predicted only). (2) Stebart Issues: SOS: Training & Frocedures: Yhten combining two indicates the pack offers, it needs to be documented in both incidents in the database (NAPACT ERM) so that the investigators have full understanding.	(1) Airborne particles powered by compressed air	(1) Airborne particles powered by compressed air	(1) Instendion to car in front of them.			(1) Un-eyen surface	(1) Body Position	(1) Body Position	(1) Pump APS spool has a non-welded nipple that leaked.

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*****	2/3/2011 1:30:00 PM	1/27/2011 12:00:00 PM	1/27/2011 12:00:00 PM	2/2/2011 6:00:00 AM	2/2/2011 6:00:00 AM	2/2/2011 6:00:00 AM	2/2/2011 6,00,00 AM	12/10/2010 3:00:00 PM	2/1/2011 12:00:00 PM	2/2/2011 3.02:00 PM	2/2/2011 12:30:00 PM	2/2/2011 12:30:00 PM	2/1/201t 2:00:00 PM	2:00:00 PM
	Clased	Closed	Cipsed	Closed	Closed	Closed	Closed	Closed	Clased	Crosed	Closed	Closed	Closed	Closed
	Loss	Loss	L 039	Near Loss	Near	Near Loss	Loss Neer	Loss	Near 1088	Negr Loss	Loss	լու	Near Loss	Loss
	K1050 low pressure	Green Card—6ft plus hole on the side of Channel Street	Green Card-6ft plus hole on the side of Channel Street	Green Card-Almosi hit while welking in cafeteria parking jot	Green Card—Almost hit white walking in cafeteria	Green Card—Almost hil while walking in cafeterla	Green Card-Almost hit while welking in cateteria parking in:	FCC Opadly During	Green Card - Potential	Momentary loss of Heavy	Contractor Particle in eye	Contrector Perticle in oye	Green Card - Electrical Cord In Walkway	Green Card - Electrical Cord in Walkway
Welflech: Enlry Atlandant left his position with a Enfrant still inside of F-2301. EEF had been performing Entry Atlandant duties for four workers inside of F- 2301, three workers extiled and informed the Atlandant that one worker was	(GPC1050 (Flare Gas Recovery suction pressure controller) was reading bind compared to 66P1055. An insthument person was in the process of cellbraling 68P C1050 and K1060 Studiown from low suction pressure. About two weeks ago as part of the flare gas electical culover project the low pressure shudown 68P (1052) was moved from a flict hard wire shudown to a shudown by through the honeywell computer, which is activated when 50Pc1050 drops to below 4PSI. In the past 68PC 1050 could be zeroed without shutling down flare gas.	Green Card - There is a 6ft plus hote on the side of Channel St that has a 4' x 4' piece of physood covering the hote, (East of Camnel and South of new Switch gear by substation #3.) have full CDE (Confus Costa Electric) safety and Chavren of the Issue over a month ago. Need to fill the hole.	Green Card - There is a 6ft plus hole on the side of Channel St that has a 4'x 4' pleds of bywood covering the fade, (East of Cemmos and South of naw switch gear by sobstation #3.) have fall of CDE (Contra Costa Electric) safety and Chrevon of the Issue over a month ago. Need to fill the hole.	Green CardDaily It is a fight for survival waiting from a pairing spot to the lear center, especially in the crosswalk. After often than not, people will make u-turns through the crosswalk, endangpaing those using It. Suggestions: Install yellow bolands in the crosswalk in between the parking spaces to eliminate the ability to drive through. Also install concrete stops in the parking spaces to eliminate the ability to drive through. Also install concrete stops in the parking spots missing them to eliminate the ability to drive through.	Green Card-Daily it is a fight for survival walking from a parking spot to the text comier, especially in the crosswark. More often than not, people will make u-burns through the crosswark, endangering those using it. Suppessions: install yellow botherids in the crosswark in between the parking spaces to eliminate the ability to drive through. Also install concrete stops in the parking spots missing them to elimainte the ability to drive through.	Green Card-Daily (it is a fight for survival walking from a parking sport to the tech contier, aspecially in the crosswalk. More often than not, people will make u-furns through the crosswalk, endangeing those using it. Suggestions: ir-stall yellow bollards in the crosswalk in between the parking spaces to eliminate the ability to drive through. Also install concrole stops in the parking space of the characteristic description of the parking space of the characteristic description.	Green Card-Daily III a fight for survival walking from a parking spot to the best conter, specially in the crosswalk. More often from not, people will make u-lume through the crosswalk, endangeing inces using it. Suggestions; install yellow bollards in the crosswalk in between the parking spaces to eliminate the ability to drive through. Also install concrete slops in the parking spaces to eliminate the ability to drive through. Also install concrete slops in the parking spote missing them to elimance the ability to drive through.	The fines vessel V-13 was put in service and an opacity occured.	Green Card - Person reporting was driving north on Center Street when a car that was stopped at the Store sign on the road behind the Cefeleria pulled out and lumed jeft in front of the reporter's car.	Received high level alarm in C-170 bolloms, saw that the flow to GHT had dropped of. Senf oxistic operator out to check an pump status white calling D&R to check! If hair valve was open or not, Outside operator confirmed that TP-171 had hipped of fine. All operating parameters were normal and pump tooked fine, so re-started pump to re-establish flow to GHT. GHT did not have to go to minimum fres, only offect seen was that the level in V-1690 (surge drum) dropped from 59% to 51%.	Foreign partide in right eye.	Foreign pætide in right eye.	Green Card - Power card from stadrical cultet to a BBO left in watway. Electrical cord was not in use - only used when using BBO. Potential hipping hazard - many people were stepping over the cord each day.	Electrical cord was not in use - only used when using BBQ. Potential tripping hazard - many people were stepping over the cord each day.
	Environmental	NL-injury/liness - Employee hjury	NL-injury/lliness - Contractor injury	NL-Transportation - Company	NL-knjuryiliness - Employee knjury	NL-Transportation • Contractor	NL-Transportation - Personal Use	Environmental	NL-Transportation - Company	NL-Operational Process/Procedures Plant Run Ou//Slow Down	คุ่มเหมียะรร	NL-injury/iliness - Contractor Injury	NC-injury/iliness - Employee injury	NL-injusyilliness - Contractor Injury
	(1) Temporary MOC 22950 reviews to transfer S/D logic to 68PT 1050 during FGR control panel outwer did not identify the need to temporarily set large or red-cap transmiller to identify it as a S/D transmiller and the MOC training and description did not specifically identify 66PC 1050 transmitter set containing a S/D							(1) V-13 was put in service without the precipitator being online., (2) V-13 was put in service without the precipitator being online		(1) The pump was inspected and found to be in good operating order. After looking at all the variables involved, there were no plant changes at that time. The only conclusion is that some component came through with the heavy gas (water, light end??) and caused the cavilation.	(1) Foreign particle in eye ,	(1) Foreign particle in cye ,		

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7416 R	7367 R	7361 R C R	7361 R C R	7381 F	7327 F	7327 F	7323	7321	7253 F	7263	7250	7250 F	7243 F
Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmend, CA - Refinery	Richmond, CA - Ratinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA • Refinery	Richmond, CA - Refinery	Richmond CA - Refinery	Richmond CA - Refinery	Richmond CA - Refinery	Richmond, CA - Refinery
2/3/2011 2:00:00 PM	1/1/2011 12:00:00 AM	2/7/2011 9:15:00 AM	2/7/2011 9:15:00 AM	2/7/2011 9:15:00 AM	2/7/2011 4:05:00 AM	2/7/2011 4:05:00 AM	2/0/2011 2:00:00 PM	2/6/2011 7,55:00 PM	2/2/2015 7:00:00 AM	2/2/2011 7:00:00 AM	2/3/2011 3:17:00 PM	2/3/2011 3:17:00 PM	2/3/2011 5:00:00 PM
Closed	Closed	Clased	Closed	Clased	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
Naar	Nepr Loss	Loss	693	Loss	Loss	Logs	Loss Near	Neer	Near Loss	Loss Loss	L033	[68 [68]	Near Loss
Green Card - Massing Hendrail	Overdue Inspections	Operator sprayed with suffric acid white starting P-1481 transfer pump	Operator sprayed with suffuric acid white starting P-1461 transfer pump	Operator sprayed with suffuic acid white starting P-1481 transfer pump	Scraped linger	Scraped finger	unable to Inject Anti- oxidation for JPB run	K-1420 trip	Tripping hezard created with Public Address system cords in IMPACT tents	Tripping hezard created with Public Address system cords in IMPACT tents	Gate 31	Gate 31	Enly Point left Unattended
Noth-east of the RVP Analyzer Building at #17 Pump Station, there is a statiovery leading up the tall to an elevated lending. The set side handrall at this lending is missing. This has ceused an extreme fell hexard.	Required T.H.L. inspection points were missed by the required due date in Meridium.	Operator was sprayed with suffunc acid and received a quarter sized acid burn to the back of his neck.	Operator was sprayed with sulfutic acid and received a quarter sized acid burn to the back of bis neck.	Operator was sprayed with sulfuric acid and received a quarter sized acid burn to the back of his neck.	Wallsen. EE was going up the stalls towards the Ox burners. EE slipped on a glove that had been left on a stall. EE grabbed for something to hold on to and scraped his right pinkle finger.	Wallfech - EE was going up the stalls (owards the Ox burners, EE slipped on a glove that had been left on a stall. EE grabbed for something to hold on to and scraped his right pinkle linger	Day shift ask to start anti-oxidantion injection. Operators unable to draw down or have any flow indication using P-285 (P-285A unavailable due to pin hote leak on down stream relief velve).	At approx 7.55PM breakers 12-704 and 12-710 opened in the Alky sub and caused the LCI VFD to trip. The back-up VFD engaged but the compressor LRPM dropped See Journal for details about alarms. Once breakers were reset, a second trip occurred and was reset. K-142D suffered no additional issues the rest of the drift.	The IMPACT lands have public address systems with microphones. The microser handed off to multiple speakers at the TARATPEM tent meetings. The long cords atteched to the micro horseased bipmell risks.	The MAPACT tents have public address systems with microphones. The mics are handed off to multiple speakers of the 7AMATPM tent meetings. The long cords attached to the mics knowses of tripital risks.	Contractor (PPS) Vehicle stuck barrier arm causing the barrier arm to break off and a creeked windshield on contractor's vehicle.	Contractor (PPS) Vehicle stuck barrier arm causing the barrier arm to break off and a cracked windshield on contractor's vehicle.	and Attendant assisted the other workers from the Entirel's company. The fourth Entirent stuck his head out and told the Attendant that he was going to remain inside for earlie longer. Clears up continued and when they where shished, started to leave his area for a break. Entry Attendant took some red tape and tapped off the manway after the other workers left and also left for a break forcefting about the fourth Entert, Entrant exited the furnace and noticed that the Attendant was going and reposited this fact to his Supervisor.
Aligority Cauchal Cauc	NL-Business Process - Business Process	injury/liness	Equipmant/Property Damage	Loss of Containment	Injury/Itness	NL-injury/illness - Contractor injury	NL-Lessons Learned	NL-Operational Process/Procedures - Plant Run Out/Slow Down	NL-Injury/Illiness - Contractor Injury	NL-Injury⊞ness - £mployss Injury	Equipment/Property Damage	Transportation	Ni_injuyilliness - Contractor injuy
		(1) Pump was not tagged in the field as Inopsiable. Operator did not incognite hazaset from defective pump as identified in lumeyer (2) Temporary MOC was extended from 2005 to 2011 with an HSE-only review. The hazards associated with this Installation were not reconfized through this review through this feet were process (3) No urgency to Repair/Improve Permanant Millon Rey Pumps.	(1) Pump was not tagged in the field as inciperable. Operator did not recognize hazards from defective pump as feedfilled in furnovers, (2) 1 emporery MOC was extended from 2005 to 2011 with an HSE-only review. The hazards associated with this installation were not recognized through this review process., (3) No urgency to Repetitingprove Permanent Milton Roy Pumps.	(1) Funny was not legged in the field as Incpensible, Operation did not recognize hazards from defective pump as identified in turnover, (2) Temporary MICO was extended from 2005 to 2011 with an HSE-only review. The hazards associated with the installation were not recognized through this review process. (3) No urgancy to Repetitingprove Parmanent Milkon Roy Pumpa.	(1) 380 Awareness	(1) 360 Awarenoss		(i) Road cause - Double contact electrical switch on a door inferiors to high voltage compartment in LCI building stilled, (2) Automatic rectoes switch on the Hammonic Filler Main Breaker (12-704) was thit in the manual position after the S/D and required an operation to go up to the switchgeer and - manually close the breaker. This was not actually a root cause of the trip but did delay getting the marchine back on line	(1) Tripping Hezerd, Cord	(1) Tapping Hezerd, Cord	(1) Driver did not follow proper procedures	(1) Driver did not follow proper procedures	(1) Lack of Manial Awareness, (2) Lack of Menial Awareness

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	7542	7540	7540	7514	7511	7497	7470	7458	7448	7448	7416	7418
Richmend, CA -	Richmond, CA - Refinery	Richmond, CA - Retinery	Richmond, CA - Relinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA Refinery	Richmond, CA - Refinery	Richmond, CA - 7449 Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery
2/10/2011	2/2/2011 12:00:00 AM	2/9/2011 12:90:00 AM	2/9/2011 12:00:00 AM	2/9/2011 8:00:00 AM	2/5/2011 10:00:00 AM	2/8/2011 8:45:00 AM	2/8/2011 10:10:00 PM	2/8/2011 2:15:00 PM	27/2011 10:00:00 AM	2/8/2011 9:00:00 AM	2/3/2011 2:00:00 PM	2:00:00 PM
	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
Z	Nagr Loss	Logs	Loss	Logs	Near	Near Loss	Near	Loss	Near	Near Loss	Lose	Near
- At approximately 1:45 A.M. 210/11 K-300A NG boosier compressor shutdown on low lube oil	Improper Lock Out Tag Out of Electricat Equipment	P124B/cyl, cover gaskat failure	P124B/cyl, cover gosket failure	E-130 safely lifted to grade	Green Card-Delivery Procedures not Followed	Spited coffss on floor of men's bathroom created skpping bazerd.	Sore throat from inhaling dust from F-2301	Contract employee tripped on crane outrigger	Green CardChain barricades on platform between T-3104 and T-3105 damaged and no longer reach	We did not train the appropriate people in a limely menner on Rt-9900 changes.	Green Card - Missing Hendrall	Green Cord - Missing Handrsii
At approximately 1.45 A.M. 2/10/11 K-300A NG booster compressor shutdown on few lube oil pressure. Operations on arrival to K-300A found (O pump P-303 shutdown. The normal LVO pump TP-30A network of the Maintenance. Inspection of the lube oil pump and system gave no indication of cause for the	Capital Project Construction was dismaniling TX-221 in SISO Flare Gas Pecowary Plant. This equipment belongs to Utilities and was not released to construction for desmantling, I discovered thits partiel equipment dismaniling condition this monthing. February 08, 2011 and it was not LOTOed correctly for either a Utility equipment LOTO or a InPlant equipment LOTO.	While attempting to establish a dry out circulation loop for the C100 module asphalt sylsem P1248 recyprocating pump blew out a cylinder gastel on the west end of the pump. We went outsing LCO (yeash eit) as our circulation medium. The LCO sprayed out of the end of the pump toward the ground and splashed back onto an operatoral legs and boots, the operator was uninjured (two layers of protection). Approximate temperature of the LCO was 140 to 180 deg.	While attempting to establish a dry out circutation loop for the C100 module asphalt sylaam P1248 recyprocating pump blow out a cylinder gashel on his wast end of the gump. We were using LCD (wears oil as our production medium. The LCO sprayed out of the end of the pump toward the ground and splashed back onto an operators legs and boots. The operator was uninjured (two layers of protection). Aprroximate temperature of the LCO was 140 to 160 dog.	E-130 serely lined to grade as designed.	Green CardContractors are signing for materials for the statitions on Fri, Sat, & Sun, Paperwark does not get praceassed through Procurement per procedure. Vandras are not getting patts.	Upon enlering the men's battroom #125 at Contral Maintenance, I noticed a large puddle of coffee on the floor that created a slipping hazard. No one else was in the bathroom at the line.	Wollech - EE complains of a sere threat. EE Inhaled dust from F-2301 while it was being blassed.	as il duly	The chain barricades in front of two valves are rusted and demaged. The chains are no longer long enough to provide a proper safe guard against sameone failing. See Raylynn for pictures.	Who did not tein the appropriate people in a linety manner once the R1-9820 was supdated in December 2010. 1. Why did "above" happen? When R1-9800 was revised we did not develop a training plan. 2. Why did "1" happen? R1 owner has no written process to develop the plan and assign higgers to ensure the plan is developed and implemented. 3. Why did "2" happen? The need had not been perceived.	North-east of the RVP Analyzer Euleding at #17 Pump Station, those is a stainway reading up the hill to an eleverated tanding. This less thandrail at this landing is missing. This has ecused on externe fall hozzerd.	Rodth-east of the RVP Analyze Building at #17 Pump Stallon, there is a stallway leading up the hill on a leivated landing. The loft side hendral at this landing is missing. This has caused an extreme fall hazard.
NL-Operational Process/Procedures Plant Run Out/Slow	NtOperational Process/Procedures Safety Systems	Equipmenঞিraperty Demege	NL-injuryiliness - Employes injury	Environmental	원-Quality - Paperwork Incorrectifud Sent	NL-injury/išness - Employee injury	NL-injuryiläness - Contractor injury	injury/ikness	NL- Equipment/Property Damage - General Listvilly	NL-Regulatoy Compliance - Non Compliance	NL-injuryilliness - Contractor injury	NL-injury/illness - Employee injury
(1) K-300A stidown due to tip of P-3031-IO pump, (2) SOS: Mainlenance & Inspection: K-300A Shuldown, Low lube O2 Pressure Alarm Activated: Lube O4 got their Vistosity got too lighthin. Cooling H-2O exchanger had resided flow. Exchanger flowers and the Schedules. Exchanger flowers are a large stored to back-flush Schadules. Exchanger flowers are a large stored flowers and the Cooling of the Sost Maintenance & Inspection: K300A Shuldown, Low lube O1 Prossure Alarm Activated. Backup pump not use of the Sost Sost of the past's for assertial months. Problems with the governor: SOS: Paranal Prodebly e Factors: Based	(1) R-9900 LOTO was incomplete due to the absence of a lock too. Equipment was found to in a safe de-energized posture with locks & lags installed at the Isoatilon switch, Equipment under control of Utilities was not identified during process of MCC isoatilon by project personnel & Hydro Ops.* TO BE OPERATED BY UTILITIES ONLY "nameplates missing at this location.	(1) SOS: Maintenance & Inspection: Surfaces were not repaired the fast time pump was taken apart., (2) Sidebar Recommendations and Corrective Actions: Design & Engineering: Castel Lead Was Ymong Maintal, Material is Hermal Material to use for normal process but not during Abnormal Process Ruins (Short-term Heavy product Rura)., (3) Sidebar Recommendations and Corrective Actions: Training and Procedures: Plug In Line Gauge, Previous pump/plant clean up was instruction.)	(1) SOS: Maintenance & Inspection: Surfaces were not repained the last line pump was taken apur., (2) Sidobar Recommendations and Corrective Actions; Design & Engineering; Casket Used Was Ykrong Material, Material is Engineering; Casket Used Was Ykrong Material, Material is Normal Process Ruirs (Short-term Heavy product Ruirs), (3) Sidebar Recommendations and Corrective Actions: Tathing and Procedures: Pulp ja Line Gauge, Previous pump/plant clean up was insufficient.	(t) Over pressured safety because equipment was not raisd for up stream pressures.				(1) Complacency		(1) RI owner has no written process to develop the plan and assign triggers to ensure the plan is developed and implemented.		

() Essents causes jumped puly and caused exession to stop		Ahile working on TKN-nactor R-530 startup, an operator reactor structure took the elevator down to ground level. About he elevator became stuck and would not move. The operator						
(1) Elavator cables in mead and v and c	- 697	At 11:30 A.M, While working on TKN-reactor R-530 startup, an oporator working on the reactor structure took the elevated down to ground front. About halfway down, he selvater became stuck and would not move. The operator stellanger down, he stevater became stuck and would not move. The operator stempted to manually bring the elevator down with no success. Plant protection was called and affected a rescue. The elevator repair company was called to repair.	Chevron EE suck in elevalo: after it abrupily slopped	Near Coss	Closed	215/2011 11:30:00 AM	Richmond, CA - Refinery	7900
	NL-Injuyiliness - Contractor Injury	Green card - almost trip - comer of sleet plate (jagged edge) turned up. Localion - Annex Frec Park Area	Green card - elmost trip	Near Loss	Closed	2/8/2011 2:00:00 PM	Richmond, CA - Refinery	7894
	NL-injuny/iliness - Employse injury	Green card - almost trip - corner of steel plate (Jagged edge) turned up. Location - Avnex Frec Tank Area	Green sard - almost trip	Near	Closed	2/8/2011 2:00:00 PM	Richmond, CA - Refinery	7894
	NL-Injury/Illiness - Contractor Injury	Green ceird - low pressure on portable eyewash at HWTSF	Green card - low pressure on portable eyewash at Hunts	Near Loss	Clased	2/9/2011 8:30:00 AM	Richmond, CA Refinery	7892
	NL-Injury/Iliness - Employse injury	Green card - low pressure on portable eyewash at HWTSF	Green card - low pressure on portable syswesh at Hurks	Near Loss	Clased	2/9/2011 8:30:00 AM	Richmond, CA Refinery	7892
	NL-injury/liness - Employee injury	Green Card - while waiting from turnstille to 136 main, person caught (oe on a wooden flootboard that is not naited down flush. The spot had previously been painted bright green, but the paint has worn off	Green Card - Trip	Near Loss	Closed	2/10/2011 12:30:00 PM	Richmond, CA - Refinery	7861
	Nt-injury/iliness - Contractor (rjury	Green Cerd - while welking from iurnslie to 135 mein, porson eaught loe on a wooden floorboard that is not railed down sush. The spot had previously been painted bright green, but the paint has worm off	Green Card - Trip	Logs Logs	Closed	2/10/2013 12:30:00 PM	Richmond, CA - Refinery	7861
(1) Supervisor cut comer too light causing Passenger side of Verticle to scrape against matal rating (2) Criver did not properly gause the amount of clearance he had to turn vehicle and avoid striking railing.	Equipment/Property Damage	PPS employee side swiped a handrall causing damage down the side of his vehicle	Damaga to right side of vehicle	5	Closed	2/14/2011 4 00:00 AM	Richmond, CA - Refinery	7780
(1) Supervisor cut comer too light causing Passenger side of vehicle to scrape against meal rating. (2) Driver did not properly gause the amount of clearance he had to turn vehicle and avoid striking railing.	Transportation	PPS employee side swiped a handrell causing demage down the side of his vehicle	Damage to right side of vehicle	Loss	Closed	2/14/2011 4:00:00 AM	Richmend, CA - Refinery	7780
(1) This was a new installation and it was found that the Quench Coburn drain valve (butlerify) was stuck in the closed position, there was not shough clearance to allow it to open. Another factor was that because this was a new installation, the level instrumentation had not been adjusted correctly yet, showing a talse level.	Operational Process/Procedures	While performing a pressure test on 2300 Plant at SRU, the pressure in #3 train got up to 4 psig. Operations checked over the train to determine cause of pressuring up and found water in C-2350. Operations then proceeded to drain the Quench Column. Working with markinstence to ensure no more water in equipment upstream or downstream of C-2350.	While performing pressure lest on 2300 Pil sew elevated pressure, found high level in C-2350	[038	Closed	2/13/2011 12:20:00 PM	Richmond, CA - Refinery	7705
(1) Person was driving sleepy and drifted to edge of road	Transportation	Driver clipped a bush with the truck mirror breaking the mirror	Driver dipped a bush with the truck mirror breaking the mirror	Loss	Closed	2/12/2011 1:45:00 AM	Richmond, CA - Refinery	7731
(1) Person was criving sleepy and crifted to edge of road	Equipment/Properly Damage	Oriver clipped a bush with the truck mirror breaking the mirror	Driver dipped a bush with the truck mirror breaking the mirror	Loss	Closed	2/12/2011 1:45:00 AM	Richmond, CA - Refinery	7731
	NL-Injuryfilmess - Empleyse Injury	Grean Caed (anerymous report). While descending stairs in the Admin Butiding, pulled the steave of my coat back to look at waterb. This caused reporter to not have 3 points of contect 8 could have missed a step	Green Card - Loss of 3 Points of Contact (anonymous report)	Near Loss	Closed	2/4/2011 10:00:00 AM	Richmond, CA - Refinery	7576
(i) The Separator Operator did not check the tank fewal anytime during the whitt, (2) Aleman send tevel indicators did not work as kitanzada, (3) Communication and work direction were bass kitan adequate, (4) No commedian made between 1-3221 level drop and the filing of 1-3128.	Equipment/Property Demage	Filling T3128 for hydro test with DWOP water. Overflowed 3128 tank during hydro 81 of DWOP	T-3128 overflowed with DWOP water for hydro testing	Loss	Closed	2/10/2011 3:45:00 AM	Richmond, CA - Refinery	7563
(1) The Segurator Operator did not check the text two! anytime during the shift, (2) Aleman and two! indicators did not work as kitanded, (3) Communication and work direction were less than alequate, (4) No counsation made between 1-3221 level drop and the filling of 1-3128.	NL-Operational Process/Procedures - Safe Operating Limit (SOL) Exceeded	Filling T3128 for hydro lest with DWOP water. Overflowed 3128 lank during hydro fill of DWOP	T-3128 overflowed with DWOP water for hydro testing	Loss	Closed	2/10/2011 3:45:00 AM	Richmend CA - Refinery	7563
(1) The Separator Operator did not check the tank leval anytime during the stift. (2) Alarms and tavel indicators did not work as intended., (3) Communication and work direction were test than adequate, (4) No connection made between T-3221 level drop and the filing of T-3128.	NL- Equipment/Preperty Damege - Equipment Damege	Faling T3128 for hydro test with DWDP water. Overflowed 3128 tank during bydro fill of DWOP	T-3128 overflowed with DWOP water for hydro testing	Loss	Closed	2/10/2011 3:45:00 AM	Richmond, CA - Refinery	7503
on rekability records. P303A was deemed reliable	Down	pump shut down.	Loss pressure.	Loss	Closed	AM	Refinery	7553

	8041	8032	7997	7997	7985	7985	7982	7968	7967	7928	7912	7911	7800
Richmond	Richmond, CA - Refinery	Richmond, CA - 32 Refinery	Richmond, CA - Prefinery	Richmond, CA - Patinary	Richmond, CA - B5 Retinery	Richmond, CA - 85 Refinely	Richmend, CA - Refinery	Richmend, CA - SB Refinery	Richmond, CA -	Richmond, CA - Refinery	Richmond, CA - 12 Refinery	Richmond, CA - 11 Refinery	CA - CA -
Richmond, <i>2/7/</i> 2011	2/17/2011 8:00:00 AM	2/17/2011 5:30:00 AM	2/16/2011 10:25:00 AM	2/16/2011 10:25:00 AM	2/15/2011 3:00:00 PM	2/15/2011 3:00:00 PM	2/16/2011 1:30:00 AM	2/11/2011 12:00:00 AM	2/10/2011 7:30:00 AM	2/15/2011 4:55:00 PM	2/14/2011 7:30:00 AM	2/15/2011 3,00:00 PM	11:30:00 AM
·	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Clased	Clased
	Near	Loss Nest	Logg	Loss	Coss	Loss	L088	Near	C V Bar	Near Loss	Loss	Near	Noer Loss
On 2 occasions, cars turned left on Center St. from behind the Tech Center narrowly missing	Trank field rd way approaching T-1469 has ercided away to the point in contain areas that it has become dangerous for Vacuum Tracks to drive on it	Green Card - Driving Wrong Way on One Way Street	EE pinch fingers while closing Stefar box	EE pinch fingers while closing Stefar box	Green Card - Gale at Megawatt & Cracking swinging open in wind	Green Card - Gate at Megawatt & Cracking swingkry open in wind	Western Drive approximately 1/2 mile inside Molete Point Cate at reliroad tracks between Gales 15 and 16.	Green Card: Finger pinch	Green Card: Rope access	Furnace fires trip on SRU #3 train during start-up	Green Card - Compuler Dask	Employee reported particle in right eye	Chevron EE stuck in elevator after it abruptly stopped
On Monday, I was heading north on Canter Street when the car turning left after stopping behind the "fech Center public out in front of me narrowly missing my cer. On Wodersday, I oue story, the same thing happened with another webcle pulling out from behind the "tech Center. There is a stop sign coming out of the Tech Center. There is a stop sign coming out of the Tech Center. There is a stop sign of the traffic heading south on Center St. There is no stop sign for traffic heading rooth on Center St. On	Green Card: Vec truck driver working in tank field reported that areas of the narrow access road to T-1459 has shoded and considered dangerous for vactifucks to utilize. Access requires backing uphil a great distance(reportedly -200 ft. or more)	Green Card - By 91 Gale, Toluene Street is a one-way street with signs. There are still people going the wrong way (Green Card reporter saw this every day this week).	EE was emplying a Stelar box. After box was emplied. EE was attempting to close the coats on the box. The doors were briding and whan closing, the "T look or paped sown and proched EE to have middle higgers.	EE was emphing a Stelar box. After box was emplied, EE was altempling to dose the coots on the box. The doses were binding and when closing, the "T look dropped form and pinched EE set two middle fingers.	Green Card - Steel gate at Megawatt & Grecking singing open in wind (can affect south-bound traffic on Megawatt). Reported by Patrochem	Green Card - Steel gate at Megawatt & Cracking singing open in wind (can affect south-bound traffic on Megawatt). Reported by Petrochem	S-6 Vehicls was driven into a ditch at the shove totalton when Driver lost bearing on the road whise diving in windy rainstorm causing limited visibility. Vehicle was stuck in the mud in the ditch. There appears to be no demage to which, No injury to driver.	Green Card: Lupon opening the discharge valve of K-14C, the extension hand whosi of the wave dropped and phohed the end of my plear's left middle inger, Lupon policing the drop of the hand whosi I was able to quickly pull my hand to the full fixes of the wave handle. Repair broken extension handle and secure the soldersion handle with a collect allowed to the handle for the result of the handle for the soldersion handle with a collect allowed to the handle for	Green Card: Requested rope access inspection. Rope access technicians walk job and discover job is 8' to 10'eff grade and is accessible by ladder.	SRU was stating up #3 trin per staft-up procedure SRUMP2100 after an extended shutdown. Refractory dry-out was ongoing. Operations had reduced fires on F-2301 to maet the temperature requirements for refractory dry-out procedure 25F-C306 (naterity gas to F-2301); was at 10% value output and the burner fires were est minimum and fillokening at times per operations. Get steam was also being injected into the furnace box to control furnace temperature. At 10:55 the fire syste at the AMST tripped the natural gas chopper valve closed when loss of fame was relaced. With the firel north natural gas chopper valve closed when loss of fame was relacted. With the firel north natural gas chopper valve.	Green Card - Computer desk / table does not provide for height adjustments for a user. Potential for RSJ / MSD risks	A company employee was waking in the SRU plant when a gust of wind blew a partiel ed dust link his high laye. Employee attempted to remove particle but was unsuccassiul. He then reported the incident to his Head Oparator who have contacted Plant Projection. Plant Projection responded and infigited his sight eye and the particle was removed.	attempole to manually bring the devalor down with no success. Plant protection was called and effected a rescue. The devalor repair company was called to repair.
	NL-Transportation • Company	NL-Transportation - Contractor	InjuryAliness	NL-injury/ilinass - Employae injury	NL-Transportation - Company	NL-Transportation - Contractor	Equipment/Property Damago	NL-injury/iliness - Emptoyee injury	NILossons Learned	NL-Operational Process/Procedures - Safety Systems	NL-injury/illness - RSI/MSD Discomfort	NL-injury/illness - Employee injury	Equipment/Property Damage - Equipment Damage
(1) Why did car 1 pull out into oncoming vehicle? Distracted by come in the middle of the intersection., (2) Why did care by little intersection of the was not saves there are the say one of the was not saves the say on only in 1 direction. There is no			(1) EE not paying attention to hand placement	(1) EE not paying attention to hand piscement			(1) Driver took vehicle out to make rounds in extremely bad workhor that resulted in smiled visibility.	(1) Extension handle was loose (no support) and allowed wheel and of handle to come in contact with existing rating.	(1) Communication gap between the work scheduler and the Rope Access Technician. FIVE WHY'S 1. Rope access orew took the rope job request found in the break. In thoo; and made a copy with the intent of checking it out as a fill in between the scheduled work they have for the day. 2. Why did '1' happen? The request earne in as tope access work and they took inflations of our per-planning and setting tipe 3. Why did '2' happen? The job requestor assigned the job as Rope Access work. 4. Why did '2' happen? The job requestor assigned the job as Rope Access work. 4. Why did '2' happen? The job requestor was rock aware of the catterie for classifying a rope work.	•			(1) Elevator cables jumped pully and caused elvester to stop

(1) External corrosion - underground line	Equipment/Property Damage	3f Castro firsh water fine (14°) developed an underground leak at the corner of Midway and Division St The teak was immediately isolated without any loss to users.	#2 castro fresh water header ruptured along Midway Street.	Loss	2/19/2011 11:30:00 AM Closed	Refinery AM	8175
(If) Incident Dascrption: What E-130 safely FC-72 litting on HCD system Where (location or where in the process); HCO product out of E-130 Where: 2/16/11 15:02 How: Problem Striemen (What is the key Issue that needs to be scribersed?): E-130 HCD system safely litting from an over pressure situation FNEW MHY'S: Why did "above" happen? Verification Pressure in HCD system exceeded salpoint of FC-72 of 140 pag 2. Why did "1" happen? P-114/A HCD product pumps a feathead of 340 pag 3. Why did "1" happen? P-114/A redastigned for unit upgrade to achieve more flow in HCD system but did not late into account higher system for the would result from the change 4. Why did "3" happen? P-114/A redastigned for unit upgrade to achieve and did not address associated equipment What was the Root Cause of your Incident? Changes were made to the system without considering consequences to all places of equipment.	NL. Equipment/Property Damage - General Liability	While making plant rounds Field Operator noticed E-130 salety Kiting to sawer. System was in steady state operation lined up to tenkage.	E-130 antely lifted	LOSS LOSS	2/18/2011 12/18/2011 Closed		8163
(1) What Technician did not finalize inspection oven though he was only partially complete prior to going to TA. 1. Why did "above" happen? Technician thought he would continue where he list off after the 1% was compared. 2. Why did "1". -Business Process Verpen" Past practice.	NL-Business Process - Business Process	GREEN CARDNDE Tech who was working non CUI Project deing an Open Vision (Real time Redicarehy) Inspection was an agned to work on the studiown. When he moved their was no sport hand-off of the work ha staded and no reports submitted to the ones he finished.	GREEN CARD-Turn over	Loss Loss	2/10/2011 7:00:00 AM Closed	Richmond, 2/10 CA - 7:00 Refinery AM	8121
(1) Why was the vent valve on the Flare Sample bomb in the open position. Why confusing? Because there is not job aid to assist with sampling task or bomb setup. (2) Why was the vent valve on the Flare Sample bomb in the open possition. Because the tags on the sample station are confusing.	Regulatory	During a flaring event on both the North Isomax and South Isomax flares, the vertified on the sample bombs were in the upon position causing the bomb to empty after the sample was done firing. This was not noticed when the sample bomb was collected so there was ricking, the sample of the collected on the cases that were same to the librath was collected so there was not analysis done on the gases that were same to the librath was collected so there was not analysis done on the gases that were	During a flaring event, the North and South Isomax flave sample were not fitted correctly. They were empty when OCD tieted to un the GQ samples, FCC sample was OK, so information from that sample will be used to make cal	6	2/17/2011 8/25:00 PM Closed	Richmond, 2/ Rofnery P	8103
(1) Plugged up displacer internats on LT551., (2) Operations did not immediately recognize that V550 was gassing out to downstream equipment.	al 	At 18:25, Hydroprocessing had a flaring incident. There was visible flaring from the North Isomax, South Isomax and FCC flared for approximately 20 infrules. If was determined that 14LCS51 had been pring a false indication since 18:00 little morning. The indication was stock at around 33%, with a set point of 31%, LCS51 output had been going open so the level could malor the set point of 50%. As the valve opened, V-550 starled gassing out in V-550, which then seek point of 68%, As the valve opened, V-550 starled gassing out in V-550, which then seek point of 50% as they alwe opened, V-550 starled gassing out in V-550, which then seek point of 50% as they alway to V-550 as the salve opened.	74.0551 indication flat lines at 33%. The valve slowing spans up for 11 hours finally causing V-800 safety to lift. This caused a flaring event that lasted 20 munites.	Loss.	2/17/2013 8.25:00 Closed	Richmond, 21 CA · 8.	8102
(1) No Procedure/CAP Tesk was in place to ensure compliance (2) Temporary ER coordinator was not formally trained and received a limited turnover.		A NOV was received in the amouni, of \$1,500,00 from the USCG. The Richmord Spill Prevention and Emergency Response Plan (SPERP) was not submitted to the USCG for the rapplied 5 year review in 2010 violating the required for the 1950 of the 1950. The plan was due for smolker review in 2010 working the requirements of Title 33 CFR Part 154. The list five year review was completed in July 2005 by the USCG. The plan was due for smolker review in 2010 two manths along the power approval explanation of the Title was not completed in violation of the requirements of Title 33 CFR Part 154. Two codes were violated the forest for failure to teathbrist the plan for approval, and the second for operating without an approval plan.	NOV received in his amount of \$1,500.00 from the USCG. The Richmond Spill Prevention and Entergency Response Plan (SPERP) was not submitted to the USCG for the locyticed by par review in 2010 vidating the requirements of 1116 33 CFR Parl 154.	Loss	2/17/2011 12:00:00 AM Closed	Richmond. 21 Richmond. 11 80EB Refinery A	8058
	NL-Regulatory Compilance - Non Compilance	Shipments of Haz Waste to foreign countries require notifications to federal IEPA according to CFR 40. A stimilar, requirement exists for Cal EPA - DTSC Title 22 Regs. These Cal EPA redications were not being made.	Administrative - 2 day EPA Audit revealed Tide 22 notification to DTSC of HW shipments to Canada not made as required	Near Loss	2/17/2011 12:00:00 AM Closed	Richmond, 2: CA - 1: Refinery A	8065
	NL. REquipmentProporty Demage - Equipment Owners	Electrician \$4 was on a rental RSC scissor lift (60) \$608) redocabing it from uncomment the PCC to enother caren of the job site using Electrician \$2 as the spotter in (cont of the scissor inf. As they appreciated the USY weeking frock the softmated clearance between the scissor lift and the funck was 8 -10°. Electrician at putted the it floward and this intention was to clear the funck and furn left in florit of the funck is a rempt leading up to a building on his right. As he selfated forward the left front wheat of the scissor lift went into a depression in the apphala as the highly front wheat was poing over a portion of the temps leading to the building for the scissor lift at this point is arred over and erine in contact with the vertical puck.	Vehicle collision	ed Logs	2/17/2011 7:30:00 Closed	Richmond, 2 CA · 7	8055
sign reminding people that cross traffic from the right doesn't stop.		Monday, there was a 3 fool cone in the middle of the street merking a pol hols. NL-Transportation - The driver said she was parity distracted by the cone	my car heading north on Certer St.	Near Loss	12:00:00 PM Closed	CA - 1 8048 Refinery P	3048

https://impacterm.chevron.com/IMPACT/ANYWHERE/Reports/exports/scenario_159134_f8a5390b-1e90-4874-b012-4d17412a3a40.htm 8/9/2012

8466	8465	8463	8432	8359	8359	8356	8263	B2235	8235	0233	8233	8189	8178
Richmond, CA - Refinery	Richmond, CA - Retnecy	Richmond, CA - Refinery	Richmond, CA - Reamery	Richmond CA - Relinery	Refinery	Richmond, CA - Refinery	Richmond, CA - Retinery	Richmond, CA - Rofinery	Richmond CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Refinery	Refinery
2/17/2011 8:00:00 AM	2/15/2011 9:00:00 AM	2/22/2011 7:00:00 AM	2/10/2011 12:00:00 ANI	2/10/2011 1:15:00 PM	2/10/2011 1:15:00 PM	2/14/2011 10:00:00 AM	2/21/2011 11:00:00 AM	2/18/2011 12:00:00 AM	2/18/2011 12 00:00 AM	2/10/2011 9:30:00 AM	2/10/2011 9:30:00 AM	2/20/2011 6:30:00 AM	PM
Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Ctosed	Closed	Closed	Clased	Closad
Near Loss	Loss	L088	Loss	Near	Loss Noss	Loss	Loss No ar	Naar	Neer	Near Loss	Near	Loss	Loss
Green card - Wooden fence/entry door swinging out of control.	Green card - Flagman/spotter needs to be provided when vec frucks are backing into the tank block.	Drawing and measure up for B/O piping on FCV- 18309 in RLOP-18 was incorrect.	Wasi side APP 30 falled	Green card - eye wash station located too for away from job site	Green card - eye wash station located too far away from job site	Sample Coder/exchanger was lost.	Bin containing "NON RCRA" soit was shipped out as "Treated Wood" but of discovered prior to final destination.	78FV/339 was out of service to have en Acceltante of Downstream Project upgrade performed but the firming of this work of di not agree with Refinery Planning needs.	75FV7309 was out of service to have an Accelerate of Dwarsteam Project upgrade performed but the timing of this work did not agree with Refinery Planning needs.	Green card - Gate came off hinge	Green card - Gale came off hinge	EE slipped and newly fell white approaching gate 1261.	spike.
Green card - wooden fence/entry door swinging out of control.	Green card - Vac trocks are required to back into the tank block which requires traffic to be blocked on Channel in both directions. A flagman/spotter must be provided to stop/spot traffic (location - 3128 (ank).	Measure up and a drawing for EVO pitch gon FCV-18309 RLOP-18 was completed 11724ft0 and teacheded in the boder stop. The Institution of the piping was placed on hold until an operational window occurred. The piping was verified the morning it was scheduled to be installed and was found to be inscalled and was found to be	8	Green pard - Eye wesh station located too far away from job site, nearest one exceeded 50' fadio distance.	940	_	Bin containing *NON RCRA* soil was shipped out as "Treated Wood" but discovered prior to final destination, investigation to follow.	Missed apportunity to put isomax, let down the dieset tall line because 76F/V7300 was at the chop to Install new from as ped of an accellence downstream project. Planting and the AEU had this week as the original planned date to make this shop repeit but a following entait solitication to delay the supprated to this veries was not realized until affect the valve was already at the shop. Ouring this period criftency planned acked the ABU to place this valve in service and it was not available. But inventors were full and there was a need to send the isomax Jet to the Diesol Tail Line.	Missed oppartunity to put Itemax Jol down the diesel tall line because 16FV7309 was at the stop to install new trim as part of an accellerate downstream project. Planning and the AEU had this weak as the original planned date to make this stop repetif but a following ernal nontreation to delay the upgrade to this valve was not resilized until after the valve was alloady at the shop. During this period refinery planned asked the ABU to place this valve no service and it was not a valided, old inventions were full and there was a need to send the isomax del to the Diesel Tail Line.	Green card - Gate (located on Office Hill) came off hinge as I was opening it almost falking on ms. I was able to move out of its way. This is the third time the gate has fallen. It was supposed to be repaired effor the tast incident 3 mos ago.	<u> </u>	White crossing the weaden welkway on the south side of bdg 130 Mein EE slipped and nearly feit due to anti-skid being wom off and frost covering the ground.	ğ
Nt Equipment/Property Damage - Equipment Damage	NL-ínjury/illness - Contractor Injury	Quality	NL-Business Process - Business Interruption	Employee injury - Saenilliyuyuk	NL-injuryiitnass - Contractor (njury	Equipment/Property Demege	Nt-Regulatory Compliance - Non Compliance	NL-Oually - Lale Shipment	NL-Business Process	NL-injuryilkness - Employee trjury	NL-Injury/Illness - Contractor Injury	Nt-Injury/Illness - Employee injury	Release
		(1) Human error			The state of the s	 Mechanic did not sign equipment into the Log book at the wash pad. 	(1) Problem with bin contents not addressed and corrected when discovered.	(1) SOS/Training & Procedures: Flow Valve 7305 Unavailable for Normal Routing of Jet. Varive was at Mackine Shop. Communication to cleary work not read. Delay request was sent late to concerned parties. Request was made only by one-way email. (2) Sidebar: SOS/Training & Procedures: There was a financial Inpact associated with this Procedures: There was a financial Inpact associated with this Procedures. There was a financial Inpact associated with this Increased to a 1 princing and the valve work was immediately completed and installed on Friday. 21/6/2/011.) Another cost was financial product through the diesel hydrowater (0HT).	(1) SOS/Training & Procedures: Flow Velve 7309 Unaveilable for Namal Routing of Jat, Vakve was at Machine Shop. Communication to cellar work not read. Delay request was sent Jate to concerned parties. Request was made only by one-way email. (2) Stobers COS-Training & notices. There was a financial impact associated with this Incident. (The work priority on the Juggrade work was increased to a 1 priority and the valve work was immediately composed and installed on Friday, 2118/2011,) Another cost was that of running jet product through the classed hydrotreater (DHT).				

	·			T			,	1		,	,	,	
	9014	8914	8750	6749	8659	8699	8678	8674	8674	8564	8545	8400	9316
	Richmond, CA · Refinery	Richmond, CA - Rafinery	Richmond, CA - Refinery	Richmond, CA . Refinery	Richmend, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Raimery	Richmond, CA Refinery	Richmond CA · Refinery	Richmond CA - Refinery	Richmond CA Refinery
	3/1/2011 8:21:00 PM	2/28/2011 9:00:00 AM	2/27/2011 5:30:00 PM	2/28/2011 12:00:00 AM	2/25/2011 6:00:00 AM	2/25/2011 6:00:00 AM	2/25/2011 1:15:00 PM	2/25/2011 5:00:00 AM	2/25/2011 5:00:00 AM	2/22/2011 12:58:00 AM	2/24/2011 9:30:00 AM	2/17/2011 6:00:00 AM	2/17/2011 8:00:00 AM
	Closed	Closed	Closed	Clased	Closed	Closed	O Se C	Closed	Closed	Closed	Closed	Closed	Closed
-	5	L038	Loss New	Log:	Loss Near	Negr	Near	Loss	Logg	Near	Loss	Loss	Near Loss
	Operator tripped and felt resulting in abassions to storehead and both hands.	Loss of Compressor no loading	° plant upset skipped water routed off test	ERO-K-2001 meter beatings falled resulting in Ship loading delay	Offiest JHT C-240 8TMS Jet Flash	Offiast JHT C-240 BTMS Jot Flash	Dead Tree fell onto power lines at 1-900	Main Gate Entrance	Mein Gate Entrance	False UPS critical alarm	near 125 line and 676 line	Green card - Wooden fence/entry door swinging out of control.	Green card - Weeden fence/entry door swinging out of control.
During C-3590 water wash V-3590 weterboot was drained to relief and fucesast flate recovery pressure. Tripped (dealizer -147 SCF, but no visible florae, Why did defailing waterboot actue) obtained revently Recovery Compressor not loaded high enough, initially K-3590 100%, K-247 100%, & K-252 0%. Why not loaded enough? Flate recovery compressor operation not 752 0%. Why not loaded enough? Flate recovery compressor operation not 752 0%. Why not loaded enough? Since the compressor loading.	The operator was walking back to his vehicle after making a tank switch when he tripped over a raised curb adjacent to T-992. The Operator fell and sustained abrasions to both hands and his foreinead, Plant Protection was notified and the Operator was treated and transported to the Refinery Clinic where he was treated and released about susported to	Less of compressor at Vecum pump house at Whart. Due to titing of wining associated with the control and alarm system. DCS system initiated the tip to the compressor.	All approximately 7:30 PM 227/2010 while SISO operators were adjusting to Condentate system to mirmital 5-50 the water makeup, we had an 8-pinkt jupes! Re bother temps and tray 4 temp dropped 15 to 20 degrees. Also NISO had issues grating old with likes of pessues condensates. SISO operators working on condensate system slowed down their activities unit everything stabilized. Because of Seferium issues in the past based on these upsets it was decided to route 8 peans of fixes what is a second sensition sample was reported from CEL.		JHT C-240 BTMS jel product was routed to product tank T-3190 with96 DEGF TCC flash for 8 hrs (6AM-2-PM). The tank finaled with a 105 DEGF TCC flash, which is the minimum jel flash spec.	JHY C-240 BTMS (et product was routed to product lank T-2190 with96 DEGF TCC flash for 8 hrs (8AM-2PM). The lank finaled with a 105 DEGF TCC flash, which is the minimum jet flash spec.	The SP HI Operator decovered a dead tree that had delien against live power lines on SP HII RG. near T-590, Utilities was nonlined and confirmed that who dead tree was on kive 480 volt wires at pole 557. To isolate this wring both breakers 70-3 & 70-4 will have to be opened. This will result in loss of power to T-690, 964, (262) #53.215, (261) #4. #327. T-697, T-892, T-3975, and T-3972 eventuring and will require 2 hour manual gauging once the power is shuldown.	Tailing Gate located at the enirance of Main Gate rated into a POV due to high whole. Owner ident want for spour the incident because they did not see any damages at the avent when it happened. Later on in the day occurd Junch the person noticed minor scratches and slight indentations on the right aide of their vehicle.	Holling Gate located at the enrance of Main Gate mited into a PDY due to high whole Count ident want to report the incident because they did not see any damages at the event when it reppend Later on in the day around such the person solited minor scratches and slight indentalians on the right side of their vehicle.	We have received UPS citical alarm message several times in the past. Aimost all of these times, it was a false notification. Want to investigate the underlying Issue related to this false notification.	Leak under standard toad into both 2 P/S 2 and 1 P/S going into the big dich. Leaks like it's coming from the area of the 128 line and the 678 line. Initial assesment puts the amount et 1/4 barret.		Green card - wooden fence/onlry door swinging out of control.
	injury/Ilinese	Business Process	NL-Operational Procest/Procedures - Ptent Run Out/Slow Down	Equipment/Property Demage	NL. EquipmentProperty Damage - Equipment Damage	NL-Quality - Product Quality (Int)	NL-Bushass Process - Business Interruption	Transportation	Equipment/Property Damage	NL- Equipment/Property Damage • General Liabily	NL-Environmental - Operational Leak	NL-injury/ii:ness - Empłoyee injury	NL-injuryilliness - Contractor injury
	(1) This incident occurred because the employee did not mathtain fine of site on the path he was walking. (2) The raised asphalic curb goes directly across the normal walking route and is difficult to see at right. (3) This incident occurred because the employee did not maintain line of site on the path he was walking.	(1) Not including SME prior to cutover from old system to new system. Had the SME been trivolved in the cutover we would have been aware of the possible failsafe shutdown.	(1) Operations manipulating the consensate system to miligate a problem in another part of the plant Backed out C-religate a problem in another part of the plant Backed out C-responsivity to independent level control on E-917 reboiler., 103 VOS. Manipulaturace & inspendent in Sev Water Problems., (2) SOS.Manipulaturace & inspendentin: Son Water Problems. (3) SOS. Taning & Procedures: No Specific Gluck Valves), (4) SOS: Training & Procedures: No Specific Guidelines on thew to make anoves.	(1) SOS: Design & Engineening: Ship Leading Delayed 19 Hours. No spare ERD or spare parts readily evallable. No contingency plan in place. (2) SOS: Maintenance & inspeciena: Ship Leading Delayed 19 Hours. ERD did not work. Benings Failed. Scheduled Moler Vibrations Check was not done. Motor Was Not Running. Motor was not leaded at the time. Motor was not started to perform the check.	(1) The jet was off test on flash because operator did not know that the DMC could cut lemperature for high draft pressure. (2) The tiligh draft possure was due to furnace furning changes and not corrected in time.	(1) The jet was off lest on flash because operator did not know that the DMC could cut temperature for high draft pressure. (2) The high first pressure was due to furnace turing changes and not corrected in time.		(1) Gala was installed without a latch to secure it in the open position.	 Gate was installed without a latch to secure it in the open position. 				

https://impacterm.chevron.com/IMPACT/ANYWHERE/Reports/exports/scenario_159134_f8a5390b-1e90-4874-b012-4d17412a3a40.htm 8/9/2012

		At approx, 09:50 loday 3/5/2011 South Isomax operations, white purging V-		_				
(1) Fire Protection System UV detection and system failure end of life	Operational Process/Procedures	Beginning about noon on Friday and continuing into dayshift Saturday Bianding and Shipping experienced an alarm flood on the UV flame detection system at 17 Pump station (Atogas Blander). Plant Projection responded to the alarm and 17 Pump station (Atogas Blander). Plant Projection responded to the alarm and System. Prohection systems was called out on Friday to adjust and reset the system. No false starm were noted on night shift out the UV Flame detection system core again began to flood alarms on Saturday dayshift. On was once again content of the system and try to determine a cause.	UV Flame Delection Alarm Flood	Loss	Closed	3/4/2011 12:00:00 AM	Richmond, CA - Refnery	9270
(1) Failed to assess potential hazerds while performing LPSA	tojury/ilineas	CVX EE treated at Martinez medical facility Friday 3/5/2011, after injuring left hand / flumb by striking it with a hammer on 3/3/2011.	Chevron EE struck hand with harmner.	Loss	Closed	3/3/2011 2:00:00 AM	Richmend, CA - Refinery	9260
	Ntinjury/iliness - Employee injury	Green Card-Miligate walking hezards, Parking blocks that are nubble. Old post that is in it is middle of the two outpitters cut off at it above grade. Meals plats covering hole that is costs and bent up causing potential tripping hazard. All of these hazards are located on Center Street walking between 84.5 Maint, and Cafeletia.	1	Near Loss	Closed	3/3/2011 11:00:00 AM	Richmend, CA - Refinery	9219
(1) Dannagod door whiy 7 Door was closed when driver pulled out why? Ramp raticad up and dannagod door why? Lithis switch on dook adjustment is off why? I samp reads to be digned root causer. Nigimment was off which caused ramp to raise when truck puffed away.	NL- Equipment/Property Damage - Equipment Damage	Received work order, Found Door 7 demaged	AT RLP , Door 7 in warehouse was damaged,	Coss	Closed	2/28/2011 12:00:00 AM	Richmend, CA - Refinery	9217
(1) Dannagod door why 7 Door was closed when driver pulled out why? Ramp relised up and damagad door why? Limb switch on dock adjustment is off why? I ramp reads to be aligned root cause. Alignment was off which caused ramp to raise when wuck pulled ewey?	Equipment/Properly Damage	Received work order, Found Door 7 damaged	ATRLP, Door 7 in warehouse was damaged.	Loss	Closed	2/28/2011 12:00:00 AM	Richmond, CA - Refinery	9217
	NL-tnjury/IIIness - Employes Injury	EE complained of disztrass and irregular head beat CFD politied, AMR called cut. EE refused tempport to hospital, AMR released. EE transported to Crinic by supervisor (or further evaluation.	EE complained of dizziness and irregular heart beat	Near	Closed	3/3/2011 2:00:00 PM	Richmend, CA Refinery	9161
(1) SOS: Traking & Procedures: Smoldering Fire in SP Hill. Sparks were fill onto debrid flammables. Debris near (15' to 20' feel) hat work. It was not anticipated the sparks would travel that for from welding location. (2) SOS:Maintenness traveled inspection: Potential Berzene Exposure to Workers. Water and Hydrocarbon Mixture Leak Occurred from the flange at 11 Water Draw Line Flange Gasket had Faifed. HMI. Unknown Cause of Casket Februre. (3) Stobbar 1ssto. Training & Procedures: No radio nosite once the supervisor had left to oversee other jobs. Cell phone used to make notifications.	NE. Injury/Illness - Contractor Injury	Covinators working on the fire water line project upgrade decisted odors near there work site. It was determined that the fire was only gasorine saturated debris in the concrete dealings dich that it off and was immediately put out by the firewatch once the worlder noticed the fire Contractor made notification to EOD safety Operator and T&B. Plant Protection was notified by EOD and T&B.	Flange leek # 1Water Oraw	Loss Loss	Closed	3/3/2011 12:30:00 PM	Richmond, CA - Refinery	9188
	NL - Equipment/Property Damage - General Liability	Green Card-H2S Bump station in front of Bidg #218 is not working. Remove and replace or post a map of other locations to bump test.	H2S Bump Station not working.	Near Loss	Closed	3/1/2011 11:30:00 AM	Richmend, CA - Refinery	9122
	Nit. Injuryillness - Employee hjury	Chevron EE was attempting to extract local from a lerge tool box. In order to avoid streasing their back, EE act on the floor near to the dool box to returnive the tools, When EE attempted to get up off the floor, EE noticed disconfiert in their elbox white pushing thenesi off of the lid of the closed tool box into a standing position.	Chevron EE experienced discomfort in their elbow.	Near Loss	Closed	3/2/2011 10:00:00 PM	Richmond, CA Refinery	9109
(1) Procedure not followed when removing lote - PRT can be remain isolated with pump inservice., (2) Lote was not audited to very start to first.	Operational ProcessiProcedures	N.les, K-501 EBV N2 quarter turn valves have totto locks with no key.	K-501 EBV NZ valves	Loss	Cloped	3/2/2011 12:00.D0 AM	Richmond, CA Refinery	9069
(1) SOS: Training & Procedures: FCC Totelizer tripped. Flow Increase in the relief system. K1050 Couldn't keep up with the sudden increase in flow. Only one compressor was unkning at the time. Board operator cloth't realize the Increase in flow was poing to require the use of two compressors. Board operator had never experienced that situation before, (2) sistebar SOS: Training & Procedures (Investigations and Lessons Learnes): There's a need for enhanced exercises on sleps and alternative actions available during increased FGR fow (loading configuration of K-1050/1070, atc) prior to known tirule exerts.	NL-Environmental -	Tripped FCC totalizer while making outside process moves to the relief system when only 1 FGR machine was r/S	Tripped FCC totalizer white making outside process moves to the relief system when only 1 FGR machine was I/S	Loss Cost	Ciosed	3/1/2011 3/42:00 PM	Richmond, CA - Refinery	8022
	NL-Environmental -	Why not informed? Operator old not believe draining water to railed would stretch fair gas recovery. Corrective actions: (1) Discuss need to inform fare recovery compressor operators when blowing down any pracladat to retied (2) Frebast K242/52 to 50% each to quickly calch incidents instead of K242 100% and K252 05 which requires actilitional time in the field to start K252.	D&R Tolelizer Event, no visible flame	Near	Closed	3/1/2011 5 20:00 PM	Richmand, CA Refinary	9018

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	9/107	9407	9396	9396	9350	9349	9302	9302	9 290	9290	9290	9271
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	2/23/2011 12:00:00 AM	2/23/2011 12:00:00 AM	3/8/2011 3:00:00 AM	3/8/2011 3:00:00 AM	3/4/2011 11:00:00 AM	3/3/2011 8:15:00 AM	3/6/2011 7:45:00 PM	3/6/2011 7:45:00 PM	3/4/2011 10:00:00	3/4/2011 10:00'00 AM	34/2011 10:00:00	3/5/2011 12:00:90 AM
*******	Closed	Clased	Closed	Closed	Closed	Closed	Closed	Closed	Clased	Closed	Closed	Closed
	Coss	Loss	1,033	5	Near Less	Near Near	Logs	Ę.	L Near	Near Loss	Near Near	Loss
	Ordered Ammonia PolySuttide and order was delayed by one week creating an outege of use. Metalkungical issue.	Ordered Ammonia PolySuffide and order was delayed by one week creating en outage of use. Metalturgical issue.	hat piece of stag landed on contractors face while welding	hat piece of stag tended on contractors face white welding		Green Card - Office Depot truck speeding	contractor injured finger	contractor injured finger	K-300 suction and discharge piping	K-300 suction and discharge piping	K-300 suction and discharge piping	While aleiting up P&A moeste V-2073 white purging N2 to relet
Sqt. Avila was exiting the door that was tocated on the outbound side of the	APS (ammonium poly suifide) was delayed by the supplier because they did not receive their catelog price update prior to arbonent and fall to communicate that information to the appropriate personnel at Cheyron.	APS (ammonium poly suffids) was delayed by the supplier because they did not receive their catalog price update price to Shipment and fall to communicate that information to the appropriate personnel all Chevron.	Contractor employes was welding on the doors on this upper deck of T-1000 when a hot place of slag lended on his face between his safety glasses and half face respirator. Receiving a small burn on employees check.	Contractor employes was weaking on the doors on the upper deck of T-1000 when a hot place of alig janded on his face between his safety glasses and half face respirator. Receiving a small burn on employees cheeck.	Groen Card - Conducted an audit of the Plant Sign in sheets for the Impact group & Cogen Lumracurd, Found the documents used weeks not ollowing the technique standard. Further investigation showed only one contract company was in compliance. Discussion with most supervisors found they were unaware of the RI specific requirements.	Green Card. Office Dapo! truck enlated Main Gala and drove at least 30 mph on Slandadd Awanue (15 mph zone). The funck turned on Certer Street and appeared to be going 20-25 mph in a 10 mph zone.	Bigge: Contractor employee was insitating a trolley on a beam punctured his finger, when he put in a keeper pin. Employee was wearing gloves at the time of the injury.	bigge: Contector employee was instating a trollor on a beam pundured his finger when he put in a keeper pin. Employee was wearing gloves at the time of the injury.	While comoting piping on K-300 B mechanics noticed that one of the spocks had an old style stadie on treaton contection (no longer legal at the retinery) and that there was significant ploe sitain on the connection. Also arother pipe has a test so all thing on the indept connection at the compressor head. K-300 A has string issues, that is a saddin on branch connection, and a wark seal clamp on it as well K-300 A was reported to operations as a safety concern lest) year.	While removing plying on K-300 B mechanics noticed that one of the spods had an old style studie or it beach considered from legal in the refinery) and that there was significant ploe signion the commedian. Also another play has a test seal filling on the floring connection at the compression had K-300 A has silling on the floring connection at the compression had K-300 A has silling on the floring connection at the compression had k-seal clamp on it is well. K-300 A was reported to operations as a safety concern test year.	While removing piping on K-300 B mechanics noticed that one of the spoots had an old style studie on benath connection (no lenger legal in the refinery) and that there was spottle-antiple strein on the contraction. Also a nother pipe has a leak test filling on the flange connection at the compressor head. K-300 A has similar issues, there is a seddle on branch connection, and a test seat clamp on it as well. K-300 A was reported to operations as a safety concern set year.	2073 PSA module, to remove the africogen in preparation for feed in to V-2073. Outside operation cracked PSV bipass to relief 3 Threads*: In displace the N? In the vessel. This is normally done so N? I re not deplaced to K-4600. This could cause K-4600 to greate smallerly. But is not in hits procedure. At this same time, the OWS 2 was mentioning segging H2 system pressures on all times stages, arrandorfest temperature to the times of the tim
	NL-Business Process - Abnormal Supply Occurrence	NL-Business Process - Business	NL-injury/litness - Centractor injury	inj <i>uryl</i> iihess	NL-Business Process	NL-Transportation - Contractor	injury/iiness	NL-injury/illnass - Contractor Injury	NL-Fire/Explosion	NL-Environmental •	Nt. Reuismanistroperty Damaga - General Llability	NL-Operational ProcessProcedures - Salay Systems
	77.00	3 3 4 6	(1) Hot Slag	(1) Hot 5/eg			(1) Improper locking pin, square ended cotter pins which cannot cause a puncture should have been used, (2) Pre use inspection not performed	(1) Improper locking pin, square ended cotter pins which cannot cause a puncture should have been used, (2) Pre use inspection not performed				

https://impacterm.chevron.com/IMPACT/ANYWHERE/Reports/exports/scenario_159134_f8a5390b-1e90-4874-b012-4d17412a3a40.htm 8/9/2012

		Breaker 12-248 opened due to bird strike causing Ortho Feeder to lose power.	Bird strike on Ortho feeder		_		
(1) Lack of communication due to normal aspects of drill. Discussed with the team these issues in post drill debriefing, as we'll as the discussed how to be aware of these issues in the dutre	irļury/iliness	Firefighter was advancing hose in Project 81 / ship structure when the hose phoed his left enkie against the walt, causing a milror sprein.	Rolled left ankle	Closed Loss	3/14/2011 12:00:00 AM CI	Richmend, CA - Refinery	9777
	NL-Transportation - Confractor	Green Cerd - A Biggle Crane work truck in the turning lane for I-S80 East swaved into the right lane as the light lurned green. He cut me off at the intersection. For some unknown reason he stopped in the road and proceeded to reveree his truck, apparently unaware I and several other care were directly behind him (with newhere to pp.). Deeped my born to cach his attention, He stopped before impacting me, changed directions and then proceeded down E. Standard Ave to Castro Size and eventually turned in headed toward 81 Gate.	Green Card - Polential MVC on public road	Closed Near	3/11/2011 8:45:00 CI	Richmond, CA - Refinery	9744
	NL-Transportation • Company	Green Card - A Diggio Crans work truck in the furning lane for 1-580 Easi swerved into the inght lane as the light furned green. He cut me off at the intersection, For some unknown reason he stopped in the road and proceeded to reverse his truck, apparently uneware I and several other cars were directly behind him (with nowhere to go). I beeped my hom to catch his attention. He stopped before impacting me, changed directions and then proceeded down E. Standard Ave to Castro Street and eventually turned in headed toward \$1 Gate.	Green Card • Potential MVC on public road	Closed Loss	3/11/2011 8:45:00 AM	Richmond, CA - Pafinary	9744
(1) SOS: Warning Devices: No vibration monitor in place at the case for K-3550., (2) SOS:Maintenance & inspections: To Be Determined: Trombleshooting Efforts Continue	NL-Operational Process/Procedures - Safety Systems	K3550 S/D and caused the furneces to trip	K3550 S/D	Closed Loss	3/13/2011 4:36:00 PM CI	Richmond, CA - Refinery	9724
	Employee filory Nt-injury/iliness -	Green CardWooden walk way on Midway St by 95F 1593 flow meter has loose boards and missing hand rail.	Green Card-Loose boards and missing hand rall near 95F1593 flow meter	Closed Near	3/10/2011 3:00:00 PM C	Richmend, CA - 9659 Refinery	9659
 Weler Jacket system pressure fow because bypass to shotpot open 	Nt. Equipment/Property Damage - General Llabilly	During a Fishing event on 3/8 Isomax operators were instructed to start the second flare gas compressor.(K-1060, K-1060 would not start	K-1060 Falled to start.	Closed Loss	3/9/2011 12:00:00 AM C	Richmand. CA - Refinery	9645
(1) Equipment (allure	NL-injury/iliness - Employee injury	th Bromine	Operator srayed with chemical	Closed Loss	3/10/2011 12:00:00 AM C	Richmond, CA - Refinery	9540
The second secon	NL-injury/lliness - Contractor injury	Employee stated his mid-back felt acre after working fitroughout the day. There was no event or incident that contributed to an Injury. Et used LPSA to pause work to avoid Injury. Canne in next day and reported feeling 100%.	Sore back	Closed Loss	3/8/2011 2:20:00 PM C	Richmond, CA - Refinery	9597
(1) V-1413 desdmen velve bad spring	Environmental	Increased flow to relief gas header. Traced flow to be from V-465. Then discovered V-1415 water udder/ deadman valve did not close totally allowing hydrocarbon to go to the relief dhum.	V-1413 udder/deadmen valve failure.	Closed Loss		Richmond, CA - Refinery	9595
	NL-injury/iliness - Contractor frjury	Geeen CardThe lines for parking stalls is worn of and unable to distinguish where the spoks are. The parking lot is also very dark due to the fact that there are no lights. Re-stipe the tot eard nated street lights.	Green Card-Parking and Lighting Issues at 91 Gate	Closed Loss	2/28/2011 5:30:00 AM C	Richmond, CA - Refinery	9577
	NL-Quality - Incorrect Product	On 39/2011 at 17:42 PM hs OWSG RLOP board operation noticed the Flow off P-1820 reflux ownp was dropping off repidly. The outside operator was dispatched to the plant and noticed the pump discharge was less than normal. He switched pumps and noticed the pressure return to normal at the same thrue the OWSG noticed flow refurning to normal. A pressure bounce occurred though out the plant because of this upset. C-1820 bottoms temp dropped befow 308 bottoms so the decision was made to redd the stripped water of lesst and wait until morning for a good lest result to route back on test.	16 plant upset routed stripped water off test	Closed Loss	3/9/2011 7:42:00 PM C	Richmond, CA - Relinery	9554
(1) Valve body corroded through as a result of pocketed liquid in a static line, (2) Dead leg was created when yelve was left in the closed position for several years resulting in failure due to long ferm exposure to accumulated process liquid.	Environmental	Odor comptaint detected to be relief gas header. Out of service MOV on old 10 inch jumpover line developed a leak.	Fcc rellef header leak	Closed Loss	3/9/2011 3:00:00 PM C	Richmond, CA - Refinery	9537
(1) Valve body cornded through as a result of pocketed liquid in a static line, (2) Dead leg was croated when valve was left in the closed position for several years resulting in failure due to long term exposure to accumulated process liquid.	NL-Environmental - Release	Odor complaint detected to be relief gas header. Out of service MOV on old 10 inch jumpover line developed a leak.	Fcc relief header leak	Closed Loss	3/9/2011 3:00:00 PM C	Richmond, CA - Refinery	9537
	NL-Business Process - Business Process	The use of erroneous data which could have resulted in significant loss in time and money. The data pulled from the database was incorrect based on a coding in the database. Data was not fully defined and then re-endered causing duplicate data to build and caused balances to be reported erroneously.	The use of erroneous data which could have resulted in significant loss in time and money.	Closed Near	3/2/2011 2:00:00 PM C	Richmond, CA - Refinery	9519
(1) Officer attempted to kick open door to exit with hands tus. His foct stuck the glass in the door and caused large spider cracks in it.	Equipment/Property Damage	quard shack at he end of his shift. Sqt. Ayls had both hands full with his porsonal bolongings and aftempted kick the door open with his foot. His foot struck the lower glass panied of the door and put a spider web crack on the glass. The glass on the door not have the control of the door and the spides on the glass. The glass on the door is still in tect but will need to be replaced.	Main Gate	Closed Loss	3/5/2011 8:50:00 PM C	Richmond, CA - Refinery	9411

	1	1	T		T	1	T	1	1	1	1
	9972	8971	9970	9957	9940	5944	9944	8936	9936	9820	9089
	Richmond. CA - Refinery	Richmond, CA - Refinery	Richmond, CA · Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmand, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	
	3/9/2011 2:40:00 AM	3/14/2011 12:06:00 AM	3/15/2011 8:00:00 PM	3/16/2011 11:06:00 AM	3/10/2011 12:00:00 AM	3/1/2011 12:00:00 AM	3/1/2011 12:00:00 AM	3/15/2011 8:25:00 AM	3/15/2011 6:25:00 AM	3/14/2011 12:00:00 AM	Richmond, 3/14/2011 CA - 8:00:00 Refinery PM
	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
	Near Loss	Near Loss	LOSS COS	Roar Loss	Near Loss	Loga Loga	Near	Near	Near	Neer Loss	Near Loss
	Green Cerd-Improper equipment and rigging personnel used to lift pipe spool	Green Card: Smoking at Innappropriate location.	K-920 Discharge Bettle ORJ Flange Lask Found During NZ Pressure Test	#3 boiler running in manual was attempted to put in exto mode	Compliance report stackment was run for incorrect time period	Report not marked Business Confidential	Report not marked Business Confidential	Green card - non-company truck was driving down the wrong side of the need by 31 gate due to poor lighting	Green card - non-company truck was driving down the wrong side of the read by 31 gale due to poor lighting	Grean Card-Fire extinguishers out of compliance	opened breaker 12-248 causing a power outage at BAPL and Hensley Street.
Operations was lesting LSHH 5003 V-500 K.O. DrumHigh level shuddown slatin of K-500. Opp used Checkist 74LH5003, Par checkist 2 outside operators lined up the wash water and bridle valves to test livts atarm with HO	Green Card—While using a telescoping forklift to set a 3" pips spool on top ter of rack, pips was open enced with no caps, became steaved over scaffold vertical pole while being lowered ring piece at C-1630 New Lube oil pipe rack. Need to use proper equipment end rigging person. Need to leave caps in piece to prevent open and entry of obstacles.	Green Card: Man emoking at bus stop, this is not a designated emoking post. Location: Bus stop @ main and color.	K-920 N2 Pressure Test was unsuccessful due to 1sl stage discharge bottle leak el the ORJ flange.	(Dn 3/18/11 @ 11:00, st Power Plant's boiler operators were altempting to put is beiner on eatic control mode. Beier was lined up (PV vs. Supenti) ready to put locked draffivel gasholier meater controllars back into the auto position from controllars were as fue in all proceed dust Mootre controllars were as it than a position, the air controller costed of the auto position, the air controller costed of the and the fue controller operated up, at their point were put boiler back under control. No smoke stams in on YOX exceedences in appensed during this boiler upset, if a baier stabilized by 11:20. No stem had upset during this time as Cogan's duct burners were already at two loads picked up the boiler upset, if a baier stabilized by 11:20. No stem had upset in a school and upset in a school of the stam #3 boiler fest was a round thirly thousand. The beier is still capable of full load of 105 MLBH.	A compliance report was preserted and submitted to a supervisor for signature. On review, it was discovered that he report included an attachment that had been run for the wrong time period, it was after hours, and the responsible individuals were on Fridays off or sick, so the attachment could not be rerun for several days. The owner letter and postage have all to be redone, causing unmercessery recycle and submittel at the "flust minute".	It was discovered that Fiere Causal Analysis reports submitted to the Air District by Bay Area mafnery are outlinely requested by and sent loo outside organizations. A recently submitted report included a drawing that was not marked Confidential Business Information (CBI). It is not known whether the drawing was attended to the out plant was released. Future reports needs to be reviewed for CBI before sending.	It was discovered that Priero Causal Analysis reports submitted to the Air District by Bay Area refinery are outlinely requested by and sent to outside argenizations. A recently submitted report included a drawing that was not marked confriential business information (CBI). It is not known whether the drawing was allushed to the copy that was released. Future reports needs to be reviewed for CBI before sending.	Green card. While driving in from Calle 31 on Channel St., I observed a non company pickup truck driving in the middle of the road. I then proceeded to abort from that thory verso no in the tare by fleshing my lights and horshing and thay then moved into the other lane now feeing the wrong direction completely. Moments late, the driver finally realised they were in the wrong the when oncoming traffic was seen although coming at thom.	Green card. While driving in from Gale 31 on Channel St., I observed a non company pickup truck driving at the middle of the road. I then proceeded to alen't them that they were no in the larve by flashing my lights and horking and they then moved into the other larve now facing the wrong direction completely. Moments larve, the driver finally reasted they were in the wron larve when oncoming treffic was seen alread coming all them.	Green Card-3 of 9 fice extinguishers in the central maintenance building have passed the date of the previous yearify inspection (3-1-10) and are now considered exched. All fice extinguishors appear to otherwise but in good working order. Need to schedule replacements ahead of time.	There was also a voltage cip on Chem and Xylenn street feeders causing eculament at the RARE plant to trip off line. The RARE Plant auto started with no inpact to the Refinery.
	NL- Equipment/Property Damage - General Liability	NL-Transportation - Contractor	NL-Lessons Learned	NL-Operational Process/Procedures - Plant Run Out/Stow Down	NL-Regulatory Compliance - Non Compliance - Air	NL-Security - Information Protection Loss - Other	NL-Lessons Learned	NL-injury/iliness - Employee Injury	NL-Injuryilfness - Contractor Injury	NL- Equipment/Property Demage - General Liability	NL-Business Process - Business Interruption
		(1) Bus stop looks like a smoking post and there is no No Smoking Sign hung in shack.	(1) I. Why did "above" happen? Because the ORJ flange gasket did not properly seal after torque procedure. 2. Why did "1" happen? Because the gasket was reused. 3. Why did "2" happen? Because it is common practice to inspect and reuse it no visual offects are found on the sealing surfaces of the gasket after YT (Asual Inspection). 4. Why did "3" happen? Astore as stabilished that the reuse of these ORJ gaskets has not presented any leak path issues. 5. Why did "4" happen? Above standard was not followed and or the shandard neads to be modified.		(1) Not having a schedule for development and review of the MACT I Report., (2) Regulatory requirements are not clearly understood.						

and the second tree indicates the second of		At 20:00. AO2 operator opened the fit time for V-1404 to 61 with 200 oil				- 1	_
(1) Why did V-14D4 over fit. Because fit line was left open unattended. Why was the fill line left open unattended. Why was the fill line left open unattended. Because operator was not trained to not leave vessel with fill line open. Why. was operator not trained to not leave vessel when filling. Bocause other operators have been deing this and the vessel has not been overfilled.	Environmental	At 2000, AO2 operator opened the fill line for V-1404 to fill with 220 oil supplied from South toomax bulk tent. Operator continued on hits rounds end checked back to finnitudes later and the foreit had increased from 70% to 74%, Operator returned to the control ocen to monitor from the Honeywell console, 10 minutes later the operator god distracted and fogal the fill line was open At acround 20:30, CO5 operator resented the filly level atam for V-1404, if he was not avore that anyone was filling the lank so though that the fivel was stated to the fight and the filling the lank so though that the fivel was to control off the high tevel atam. He did not notify anyone that he proceived the dam. At 22:30, operator was making counds and noticed oil overflowing.	V-1404, Seal Olf Pot, overfilled.	sed Loss	9/17/2011 9/07/2011 P.W. Closed	Richmond, CA-	10084
(1) Gauge on tank was not working properly.	NL-Environmental - Spāl	While filling an 8' tank with desst, driver was watching the gauge when the tank overfilled. The amount west less than 1/2 gallon that was captured into the containment. Fire department responded.	Diesel Overfit	Loss	3/17/2011 3/15:00 PM Closed	CA - Refinery	10074
(1) Gauge on tank was not working properly.	letnemmo:vn3	While filling an 8' tank with classi, civier was watching the gatige when the tank overfiled. The amount wastess than 1/2 gallon that was captured into the containment. Fire department responded.	Olesel Overfix	sed Loss	3/17/2011 3:15:00 PM Closed	Refinery I	10074
And the second s	NL-Transportation - Contractor	Contract employee backed truck into pole east of Sak house	contract emptyse backed truck into pole	sed Loss	3/17/2011 1:30:00 PM Closed		10063
to knesing positions themselves while standing back up from the knesing positions which would of prevented the loss of balance and subsequent first left hijury.	kjurylihass	CVX EE lost their balance while standing up from a kneeling position and leil backward onto a wooden crate and injured back.	CVX EE lost their belance while standing up from a kneeling position and fell backward injuring themselves on a wooden crale. EMF's were called and the Clinic is evaluating the EE.	Loss	3/17/2011 7/00:00 Closed		10051
the state of the s	NL-injury/liness - Employee injury	CVX EE lost their balance while standing up from a kneeling position and fell backward onto a wooden crate and injured back.	CVX EE lost their balance while standing up from a kneeling position and fell backward injuring backward injuring wooden cralls, EMT's were called and the Clinic is avaluating the EE.	Loss	3/17/2011 7.00:00 Ciosad	Richmond, CA - Refinery	10051
(I) What; Virus detected on PCN after using a portable single dwice to inanster a bardup file from a standsione computer Why; Portable storage device was not scanned on the GIL network prior to connecting to PCN Why; A standsrone computer Why; The standsione computer Why; The standsione computer You standsione computer Why; The standsione computer you standsione computer Why; The standsione computer you seem of the secure network, (2) What: Virus detections and standsione computer Why; Portable storage device from a standsione computer Why; Portable storage device from a standsione computer Why; A subsequent scan identified and removed a whole from the standsione computer Why; A subsequent scan identified and removed a whole from the standsione computer Why; A subsequent scan identified and removed a whole from the standsione computer Why; A subsequent scan identified and removed a whole from the standsione computer Why; A subsequent scan identified and removed a whole from the standsione computer Why; A subsequent scan identified and removed a whole from the standsione computer Why; A subsequent scan identified and removed a whole from the standsione computer Why; A subsequent scan identified and removed a whole from the standsione computer Why; A subsequent scan identified and removed a whole from the standsione computer Why; The standsione computer Why; A subsequent scan identified and removed a whole from the standsione computer Why; The	NL-Gusiness Process	A virus was detected and quarantined on an engineering GUS station while transferring an image file from a standations computer to the PCN for scorage using a portable US storage device. The process of storing image files on the Process Control Network for control related computers is a normal part of the slate backup and recovery process.	Viole threat	Nagr	3/1/2011 12:30:00 PM Closed	Richmond, CA - Refinery	10031
	NL-Injury/Illness - Employee injury	Green Card - when walking to carderia & descending steps, a co-worker coming the other way reminded me to use the hand-rail. Turned out that I was about to "step over" the last step.	Green Card - Potential Trip	Closed Loss	3/16/2011 11 50:00 AM Cla	Richmond, CA - Refinery	18012
(1) inadequate communication as to what valves needed to be lowed to make the sir tils in	NL-Lessons Learned	K-1600 recycle compressor unboaded during an air cutover to the New P-:601 project a miscommunication between main and operations lead to the wrong varive being isolated for the lio in and a subsequent loss of eir to the loaders on K-1600	K-1500 unlosed on loss of air signal to leaders	Near Closed Loss			10005
(1) Plugged bollom lead on High level shutdow pot caused by level piperg internal corresion caused by test water romaining in the transmitter leads and in the floatcharaber	Operational Process/Procedures	observing, K-500 was pieced in S/D bypass for lost. Valves were manipulated for the list and after 5 millusis whan no atam carbe in the lest was aborted for the list and after 5 millusis whan no atam carbe in the lest was aborted and the valves were place back to normal. The Ho was culled in for a safety meeting atong with the operatios. 10 minutes into the maeting K-500 S/D on high level in V-500. L6H 5002 the high level atam never came on before the typ. Levels in V-500 appeared to boilt track and in the 15-18 percant bu L5H 5002 was level after the plant was stabilized and it did atam satisfacily L5HH still in the HH atam sten and K-500 in safety bypass with safety bypass form filled out. Manual shuldown will be the mode of shuldown it L5H 5002 the high level atam is activated.	K-500 Hipped	Closed	276/2011 2:23:00 CH	Richmond, CA - Refinery	9984

(1) NOT BEING AWARE OF SURROUNDINGS	Damage	GROUND AND BROKE THE HANDLE ON 11.	VALVE WITH MANLIFT	Loss	Closed	W	19 Refinery	10309
	Equipment/Property	EMPLOYEE WAS BACKING OUT OF WORK AREA AND AS HE SWUNG OUT THE BASKET ON THE MANLIFT HE HIT THE WATER VALVE ON	EMPLOYEE HIT WATER				Richmond	
(1) Did not walk to the back of the vehicle to identify if there were any hazards.	Transportation	While leaving the long wharf backed into a frailer.	Back into trailer denting the passenger side panel on the truck.	Loss	Closed	d, 3/22/2011 10:45:00 AM	Richmond CA - Refinery	10357
(1) Driver did not see vehicle behind him. He admitted that he could have looked over his shoulder instead of using the mirrors. If he had looked over his shoulder he would have avoided the collision. Using the mirrors forced him to look from one side to the other, adding to the opportunity to miss an obsticle.	Equipment/Property Dannege	RTD Driver was picking up mei orfsite at Kinder-Morgan. Van backted into car. Milror damage. All parties are ekay, no injuries Discusses possibility of parking in let and walling into warehouse to got up mail. Area at leght and visibility is middinal. Forces driver to back out it they put in rather than walking in.	Van backed into cer ❷ Kinder-Kergan.	Loss	Closed	d, 3/22/2011 7:00:00		10334
(1) When mud slide was fixed with rock to hold back hill it was let It at that time replacing the covering on wood drain box with galvenized covering would not be cost effective with our replacing box, Job clid not have the money	NL-injury/filness - Contractor injury	Green Card-Steel grate missing over catch basin along Quarry Rd, 75 yards past TK 3227, in the main tank field. Need new gate over the catch basin.	Green CardNissing Grating	Near	Closed	d, 3/21/2011 8:00:00	Richmond. CA - 2 Refinery	10322
(1) The Iraining material (EDM) is less than adequate to meet the requirement since it does not include any description on how the BAPL is powered.	Operational ProcessiFrocedures	During the lightning storm on 3/18 the BAPL shuldown due to loss of power. The Pipalite Operative suppliered that they call indications and could not control anything on their end. Additionally, the pipalities operator explained that they were trying to get an update on the power supply from PLG & E. At the time this seemed sintly reasonables and was ware busy responding to several other issues associated with the electrical storm and loss of Power on the Kinder Morgan pipelines. On 2018 a review of the Electrical Distribution map revealed that the BAPL, pump station receives its power from the Ortho Feeder. This was confirmed by U.EE it also ometime after 1995 the power supply to the BAPL station was switched from P.G. & E to the Ortho Feeder. One other pentil it has our electrical folks do not work on or have access to the BAPL pump station was switched from P.G. & E to the Ortho Feeder. One other pentil issues on this equipment. This lack of understanding on power supply resulted in a 244 form repetition of the PaPL.	BAPL S/D during electical	Loss		7:30:00 PM	Richmond CA - CA - 3 Refinery	10283
(1) Pre existing condition- back problem	injurytiiness	EE taken to the clinic for evaluation. EE set down and felt back pain, may be an existing non work retailed fijlury, crure to come.	EE taken to the clinic for evaluation. EE set down and foil back pain, may be an existing non-work related injury, more to come.	Lone	Closed	1, 3/21/2011 4:00:00 PM	Richmond, CA - B Refinery	10279
	NL-Businoss Process	Porteble Rectios not working relaibly. Busy signals occurred frequently.	Radio Communication between porteides unreliable at 5am ~ 5:15am	Vaar Loss	Closed	1, 3/21/2011 12:00:00 AM	Richmond, CA - Refinery	10259
	NL-Operational Process/Procedures - Safety Systems	lolal of S0 interruptions on a redundant system between radio controler and centra com.	Signal Interrupt on from Radio Controller to Centra Com	Near Loss	Closed	, 3/19/2011 12:00:00 AM	Richmond, CA - Refinery	10256
	Nt-frjury/liness - Emptoyse injury	Crean Card-Roof drain above cafeteria is plugged. Primary drain life is plugged and overhow line is dumpting weller close to doorway, creating wet slippery conditions inside building. Roof drain needs to be unplugged.	Green Card-Reof Drain Plugged by entry door	Near	Closed	1, 3/20/2011 12:00:00 PM	Richmond, CA - Refinery	10220
The state of the s	NtOperational Process/Procedures - Safety Systems	l -	TKN F-510 Furnace inlet Ti effected by rain down pour	Near	Closed	. 3/18/2011 10:37:00 PM	Richmond, CA - Refinery	18101
	NL-Business Process - Business Interruption	Xytene Fooder 12-244 spensed causing an electrical sutage to Castro Stoon, Pump Station, 19 pump station, Light & Lubs of D4 rea, EOD/Haz Waste Area, Verx No.rid Area, 31 Gata, SOSS Station Service(Normal Supply)	Xylene Feeder 12-244 breaker opened	Near Loss	Closed	3/18/2011 8:59:00 PM	Richmond, CA - Refinary	10152
	NL- Equipment/Property Damege - Equipment Damege	Operator found a minor dent in the Lab Truck door white making his truck inspection.	operator found dent in truck door accorss from door jam	Rear Loss	Closed	. 3/18/2011 7:00:00 AM	Richmond, CA - Refinery	10148
	NL-Business Process - Business Process	Gioon Card - Employee almost paid for funch using their company travel card instand of their paraonal credit card (which looked vory similar)	Green Card - Near use of company credit card for personal business	Near Loss	Closed	3/18/2011 12:00:00 AM		10125
(1) Why did V-1404 over NI. Because fill line was left open unattended. Why was the fill line left open unattended. Because opendior was not trained to not leave vessed with fill line open. Why was operator not trained to not leave vessed with fill line open. Why was operator not trained to not leave vessed when filling. Because obere operators have been doing this and the vessel has not been overfilled.	Operational Process/Procedures	supplied from South Isomax bulk tank. Operator continued on his rounds and checked bask 10 minutes later and the level had increased from 70% to 74%. Operator returned to the corridor forom to meritor from the Inchaywaii console. If of minutes later the operator gool distracted and regist the till fine was open. At around 20:30, CDS operator received the high level along 10:41.00.1 He was not appearance that the second operator the second operator that are the second of the second operator received the bigs and mostly arroom that he received the bounding off the high level along. He did not notify arroom that he received the laters, Al 22:30, operator was missing tourds and moliced oil overficewing.	V-1404 Seal Of Pol, overfited	Loss	Closed	3/17/2011 9:00:00 PM	Richmond CA - Refinery	10094

	10502	10468	10419	10419	10419	10415
Richmond, 3/23/2011	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmend, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmend, CA - Refinery
3/23/2011	9/23/2011 12:30:00 PM	3/23/2011 8:45:00 AM	9/22/2011 10:00:00 PM	9/22/2011 10:00:00 PM	9/22/2011 10:00:00 FM	3/14/2011 12:00:00 PM
	Closed	Closed	Closed	Closed	Closed	Closed
	Sa S	Loss	Loss Loss	Near Loss	Near Toss	Noar Loss
During the oil spill response on 23 March, two work boals look on water and submerged in the bay with 3 responders existing the water. A rescue workboal with two responders also submerged after coming to aid the first boal. 5 personnel in total entered the water. All personnel were reacced using the larger Manson response were reacced using the larger Manson response water the case of using the larger Manson response	During the oil spill response on 23 March, two work boats took on water and submerged in the bay with 3 responders extering with 3 responders extering the water, A rescue workboat with two as the expense of the water, A rescue of the water, A responders also as the regard fact coming to all the first boat, 5 personned the water, All personned the personned the water and the water a	Smati jet spili to Bay when bleeder left open en pump at Whari	Richmond unable to supply commitments on LSVGO to El Segundo (Twice)	Richmond unable to supply commitments on LSVGO to El Segundo (Twice)	Richmond unable lo supply committeers on LSVGO to El Segundo (Twice)	Green Card-Personnel Wesking on Piges in Overhead Pige Rack
During the oil spill response on 23 March, two work boats took on water and submitted with 3 response a state of the state	Ouring the oil spill response on 23 March, two work boats took on water and submerged with 3 responders entiting the water. A rescue workboat with 2 responders also submerged after coming to eld the first boat. Submerged after coming to part to the first boat is personned to a personned workboat with 2 response boat. All personned ware checked by EMTs at It's Command Posts and It'nn transferred to the crinic for evaluation. There were no injuries to report. Both boats were accorded:	At 09:45, Chevron employee saw cil in water near Wharf lab and Immediately notified the Wharf Serby Operator who found a suctout pump running with it's discharge bleeder open spraying lat heil into the grain line running to the sere a surrip. He shocked in the bleeder and notified the Wharf KO. The sump backfilled up to a high level and then backflowed into another crain line into the connecting pen axes below the wallowsy grainings. The pen normally saticiss in lang edges and gravity drains in the same eige surrip. The pen into some pinhole lesks and ellowed ~1 burnet of jet tuel to drip through to the bey water below.	1. Richmond commilled to being able to supply VAZOR via TK3196 to El Segundo. Routing was determined to now work when trying to implement and was not able to produceship segregated product as planned. 2. Richmond planned to skip 60 MB of LSVCD from Tk3196 of Imported pasoil. Tank haster was troken and fank temperative was spopparedhing 81F pour point (actual temperature was 90F) and did not have 20F of required to ship gasot. These how unsuccessful suports reduced the contingency days for El Segundo's VRDS shuddown going long.	1. Richmond commilled to being able to supply W22QR via TK3156 to EI Segundo. Pouting was determined to new work when bying to implement and was not able to produce/ship segregated product as planned. 2. Richmond planned to skip 60 MB of LSVGQ from Tk3156 of imported gasoli. Tank heater was trokes and tank temperature was applyanthing 81F pour point fectual temperature was 90F) and did not have 20F of T required to ship gasoli. These two unsuccessful apports reduced the conlingency days for El Segundo's VRDS shudown geing iong.	I. Richmond committed to being able to supply W2D2R via TX3186 to EI Segundo. Touring was determined to new work when bying to implement and was not able to produce/ship segregated product as phanned. 2. Richmond planned to ship 60 AB or LSVGO from TX3186 of Imported gasolt. Tank heater was throken and tank temporative was approaching 81F purpor point (actual temporature was 90F) and did not have 20F of Texpited to ship gasolt. These two unaucressful exports reduced the conlingency days for EI Segundo's VRDS studdown going iong.	Green Card—Short service employee was working in pipe rack at RLOP. Ferson was standing on pipe. He was using same pipe to use as an anchor point. Archor point was not sufficient size secording for RJ-380 Section 6.7.3. Head to have all employees that work in elevated conditions know all requirements before putting themselves at risk. More training for these limiteduals.
	NL-injuryilinass - Contrador injury	Environmental	NL-Business Process	NL-Business Process - Abnormal Supply Occurrence	NL-Business Process - Business Interruption	NL-Injury/Iliness - Contractor Injury
(\$) No Training or propositions in plans (3) Boal Doning	(1) No Training or procedurss in place , (2) Bost Design Inatiquals for Application , (3) Bost Design Anadquale for	(1) "he Whart Leb Operator left the area with P-2 running and the blaster open (2) The integrity of the Lab Pad Orip Pan was found to be compromised; (3) The drain line from the wharf lab pad to the surro was plugged with foreign objects.	(1) Not enough communication eround priority on <i>tow</i> tank temperature.	(1) Not enough communication around priority on low tank temperature.		(1) SUS: If allning & Procedures: SSE (Short Service Employee) Verking on 27 Pp. en Pipe Nay, Did not recognize risky position. Did not recall training for rail protection requirements. No experience working in refinery (First day on ID). SSE's (cremen (mentor) did not stop SSE. Did not recognize risky position of expolyee. Did not recall training for fall protection requirements.

CUSA-CSB-0000055 EPA

10502 Releasy 10552 Refrery Relicery Raticary Retirent, CA. Relinary 12:00:00 AM 12.00 00 12.00 00 7:45:00 AM 4, 32,42013 10,00000 ¥1230:00 7227291 1.00:00 Classed Clesed Hear Gate 121 eating technology to the Loss striking contractor rivok Near Green Card-Unmarked Loss and Loose Grakeg Section III told at least of the section of 12 factors of real injuries to report. Both bosts were recovered. The part of the property of the part of th Green Card-Van didn'i Rispi al alop alon gale 121 sall dosed stelling contrador tools. No compay to brack or gale.

Grant Cart - Was subbay by F-22 and recognished streament graphs and
almost levided my recken into all as the highly tradesced reckers. The princy
front and types, causing my to because decode, consultany. Also the close and
from the highest partial principles are all also by proving and principle
from the first many always parts by the principles. In a first part is a many front and in any
ment it is a stating machine-rest proof. Owing the all pill or speans on 22 March, her worth boats look or weiter are admiring fall to the sp. That or both above pile with 1 septomber sensing that admiring fall to the sp. That or what is a starting fall of the coming to sell of a stock or speak or speak to be coming to sell or all to sell or speak Green Card-Stopped at stop sign, my turn to go. Someone on call phone related right through stop sign and atmost thin me. Van did not have any logice on the stote. EMTs at the Command Post and then transferred to the cfric for evaluation. This is we're no injuries to report, Each board we're recovered. Equipment/Property
Damage - Equipment
Damage Equipment Property Damage Equipment/Traperty
Darrage - Equipment
Darrage NL Environments . Inadquate for Application , (3) Soat Design Inadquate for Spit Equipment/Property Demogra AL-hjaydhess -Employee hjary Equipment/Property Cleanage N. JejunyAlmens . Contractor Injury Equipment/Freperty Demage (1) Last of 8 good process control by then, compressor surpa en) per stry other swarts that couled companies companies the finus besting from axid objectments according those that they present the word cause of the modern (1) Manthold design with Carn Lock quick contract contraction of and include weep inde or year in cap, (2) Employee did not enderstand that infrigulation or removal of cap was part of the eculoment he was not authorized to handle. (1) Weather conditions were wet and white, which made it even stope stopers. EE did not eventue stopicases work authority. EE did not get the right propie anothed. (1) No Training or producture in place , (2) Boat Design (nedquate for Application , (3) Doal Design Inedquate for Application (1) No Treining or procedures in place, (2) Bost Design inadquate for Application, (3) Bost Design Inadquate for Application

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allerance	NL- Equipment/Property	Confractor Employee was backing his truck up from work site at beigh 1. Not				1, 3/30/2011	Richmond,	
(1) Employee not aware of surgundings, did not conduct a 350 swamess.	Equipment/Property Damage	Contractor Employee was backing his trock up from work site at berth 1. Not noticing that another emplyoee had parked behide him. The truck was not visible and he backed into the passanger side of vehicle. No one was hurt.	мус	Lass	1 Closed	3/30/2011 11:45:00 AM	Richmond, CA - Refinery	11003
	NL-Business Process	in doing a survey of the RIE3 So. Isomax DH+ network, it was discoverd that the ballery fault light was on for 63PLC02.	Battery failure on 63PLC02 for K930/K940 boosler compressore alarms	Near Lass	1 Closed	, 2/15/201 12:00:00 AM	Richmond CA - Refinery	10959
(1) Import feed 90% point increased causing to jet flash and freeze to go off test	Ousily	On the high of 3/28 operations noticed C-730 bottens was fut and began to make moves on the led's high yill up and get level on control. First Joh samples where a +/2 freeze Spec -40 and at 00 flash tipse of 108, CC3 made move to turn the jat by cutting draw 300 BBLS. Through the night freeze and flast continued to move in the wrong direction. A 132,300 M effer the 3/d of flast sample (102 flash and -38 freeze) and many moves on the jet draw 30/EPD total and so reactors CAT to control C-730 M, tap jet was routed of test and	lso je: routed off test dua to off spec on Flash and fraeze	Loss	1 Ctosed	3/29/2011 3/30:00	Richmond CA - Refinery	10781
	NL-Lessons Learned	Employees set up Fabricalion Tabbe and explament, used power from incal mospilacte and began activities. One employee needed additional electrical processing and added at "appliant to GFCI and Byed out acciding sextension conf to lists area. When he attempted to use power tool he did not have power. Other employee for prover to his tools as well. Employees the moneched edded conf and switter and attempted to power tool at the GFCI without success. GFCI would not recol. Employees then investigated healers in the sighting panel, no wished togs were seen. Employee checked the receptace number and corresponding breaker and attempted a reset to breaker with no results, etill no power to GFCI adapter. Employee them pusped into another receptace with same issuits no power to GFCI Adapter. Employee them to set teached receptace humber, which was LF-1 and went to Lighting panel. At the time employee had checked panel schedule and read circuit (analization them went) to corresponding circuit breaker, to Croult 1, employee stread of Circuit 1 and then coalized that Circuit 2, and 5 were Mein Circuit Broakers. Employee notified Opnations who happen to be there at the time and Operations took care of reasting Circuit.	Open wrong breaker in lighting panel, shut down compressor	Near	Closed	, 3/28/2011 8:30:00	Richmond, CA -	10744
	N∟કારૂપાં!ness - Employee injuy	Green card - Trench (located on Standard Ave.) started to cave in taking adjacent surface area with it.	Green card - french (focated on Standard Ave.) started to cave in taking adjacent surface area with it.	Near Loss	Closed	. 3/23/2011 12:00:00 AM	Richmond, CA - Refinery	10697
	Nc-injuy/iliness - Contractor injury	Green card - Trench (located on Standard Ave.) started to cave in taking states are with it.		Near Loss	Glased	3/23/2011 12:00:00 AM	Richmond, CA - Refinery	10697
	NL-Transportation - Contractor	Green Card—A green carl that was traveling south on Center Street made a right kum onto a one-way street that runs in the opposite direction.	Green CardWrong Tum Benind Cafeleria Onto a One-Way Skeet	Near Loss	Closed	3/10/2011 11-15:00 AM	Richmond, CA - Refinery	10694
(1) Sample drain line was prugged with resilutivnich caludo a high pressure condition which rupulared, (3) SOS. Design & Engineering; Operator Sprayed with Oil. Sample Burped Out of Funnet, Water in the line acrate in contact with heat on aleann trood line and expanded (engined with the SDA, Funnet) Drain Line Plugged. There are restrictions in the line (P-traps)., (3) Oesign & Engineering (Design of Processy): Consider Verification and Validation process for processy): Consider Verification and Validation process for processy: Consider Verification and Validation process for completed closed out work creden to ensure correct miligation or solution steps were leiken and are in place., (4) -Training & Processures (Communication): Decon (decontamination or clean up of the operator) took process and desponses Training): Decon (decontamination or clean up of the operator) took approximately 5 to 6 hours in part due to available material did not remove all (July clish washing deap and LAVA scapp). Immediate operator decon efforts by Emergency Responses and only process for complete of the sefector (Inc. SDA was removed more repidly with a different material (Dawn).	Environmental	White stamping to sample P-2 Discharge the operator was sprayed with heavy vis fuel cit.	Operator sprayed with Fuel	Loss	Closed	3/25/2011 6:40:00	Richmond CA - Refinery	10629
(1) Suspected Visier in the #S valve actuator caused valve to seize	NL-Operational Process/Procedure Plant Run Out/Slow Down	Operations responded to loss of instrument oir compressor K-303. Compressor shut down on high vibrations for reasons unknown.	or K-303 instrument	Loss	Chosed	3/25/2011 8:55:00 PM	Richmond, CA - Retinery	10608

	NtOperational		Link Lines to Centra Com	_		Richmond, 3/29/2011	Richmond,	
	AL-Business Process - Business Interruption	The copper vites betwee the radio control in Firehouse and the communication system on high hit experienced another near outsige.	Link Lines to Centra Com Redio sylem in Refinery oulage	Loss of	Closed	3/29/2011 12:00:00 AM	Richmond, CA - Refnery	11219
(1) Liquid entered K-940 and knocked out in #1 cylindsr, causing the piston damage. There is no online high level instrumentation on K-9110 filler/contexcer upsteam of K-930/940	Equipment/Property Damage	K-840 shull dawn on high motionend ultration after running epiproximately 2 hours, following at it cylinder maintenance work. Initial conditions note K-940 was safulp to run Rhen HZ per normal configuration. K-930 was shut down at the three K-940 was started up. Lintil K-940 shut down, at 1 cylinder sustained thesely damage on the pistion and connecting rod due to suspecced liquid contamination into 1st stage.	K-940 1st Stage #1 Cylinder Damage		Closed	3/24/2011 5:15:00 PM	Richmond. CA - Refnery	11208
(1) Did not communicate clear expediation on the use of tank	NL-Operational Process/Procedures Safe Operating Limit (SOL) Exceeded	At 6:25FM libs Refined Conselo Operator resieved a high level alarm on 1-957 (Tetrams) - Tags T RTS51A2. Review of 1-357 can have shown that the lank should be no rise in 1-957. A review of 1-357 can have shown that the lank fewal increased? 4 bbits at a slow rate over the course of 5 hours straining at 12:14pm lodey, A check of all associated piping, monifoles of the overald no runsual conditions. No PRD's were delected to be tasking by. The tank fill block was then closed and the level was lowed for bedown safe all height, Was suspend the problem may be with the 3" Totramer fwin seat valve at 750. This review was recently identified as not being able to be fully operated. A work feducal #3/2522 was issued and the flought is final penhaps this valve is teaking by. Also identified that he 7-557 fit win seat valve at the tank manifold is add order. This valve has been written up for maintenance to inspect and repair.	T-957 exceeded safe oil height by 21 bbis (suspect	Near I	Closed	3/31/2011 8:25:00	Richmond, CA. Refinery	11157
(1) Not communicating pre-existing medical condition on shoulder	inkrylliness	An employee on a workboat retrieving wet absorbert pads from the water felt path in this right shoulder while lifting one of the pads into the workboat. The amployee of one lepart the possible rightly until the next morning when he notified his Head Operator.	Shoulder discomfort / First Ald	Loss	Closed	3/23/2011 10:30:00 AM	Richmond, CA- 1153 Refinery	1153
(1) Walkway was undermined due to the rainy weather	NL- e Equipment/Property Damage - Equipment Damage	Geon Card, Leg undernined by latest storm, Walkway not sturby, Needs to be secured or replaced before standing on this section over plosway. Location: Pole St. below 3160 Tark - PCC	Green Card. Leg undermined by letes! storm, walkway no! sturdy, Location: Pole St. below 3160 Tank - FCC	Near Loss	Closed	3/26/2011 9:15:00 AM	Richmond, CA - Refinery	11094
	NL-injuy/iliness - Contractor injury	Contractors found a wasp nest in a portable battroom at the hydroblest pad. The wasp's had taken over the bathroom and were attacking anyone who tried to enjerit.	Green Card: Wasp nest found in portable bathroom at the hydroblast ped.	Loss T	Closed	3/31/2011 7:30:00 AM	Richmond, CA - Refinery	11085
(1) Plant rates atmost impacted that to K-930 VOC deadline for repairs and K-040 on peoling minintenance. 1, K-040 and to maintenance. 1, K-040 and to maintenance. Atteries the K-930 Voc test knowed that K-930 Voc test knowed that K-930 VOC test knowed the opair of the opair was not expaired in a finally manuse head of the hard 5 year repair deadline during routine maintenance windows. Repair was schoolded only 1 week before the VOC due date and did not allow sufficient time to sellow for unantipleated additional complessor repairs. 30 Operations did not understand the need to shut down K-930 if it was not capatived by the deadline in order to avoid a soccessed event and permit violation.	NL-Regulatoy Compliance - Non Compliance - Air	K-830 has a shuddown VOC that will expire at the end of the day on Sunday, 4/3/11. This VOC point mealurs the pecking vants from the compressor cylinders. These VOC leafs have historically peen passed on the shuddown repart list and due to Sysers. Beginning in January, attempts have been made to repeir all booster presenting its and one of Sysers. Beginning in January, attempts thave been made to repeir all booster presents of the Sysers. Beginning the January, attempts the second present	K-93C Packing Vent VOC Leak . Potential Production Loss due to VOC Leak Repar Deadtine	Near L	Closed	3/25/2011 12:00:00 AM	Richmond, CA -	11013
(1) Plant rales attnost impacted due to K-330 VOC deadline for repairs and K-940 on spoing mäntenence. J. K-940 shut down unexpectedly the same week that K-930 Wes scheduted for maintenence, deskying the K-330 repair by 1 week. Z. K-930 VOC leak repair was not repaired an a limely manner attended of the hard 5 year repair deadline during routine maintenance windows. Repair was scheduted only 1 week before the VOC due date and did not allow sufficient time to allow for runarificipated additional compressor repairs. 3 to allow for runarificipated additional compressor repairs.	NL-Business Process - Business Interuption	K-930 has a shuddown VCC that will expire at the end of the day on Sunday, 4/3/11. This VOC point monitors has packing venits from the compressor cylinders. These VCC leaks have historically been placed on the shuddown repart let and one hot years. Beginning in January, allennys have been made to repair all booster podding leaks within and between regular H2 booster maintenance windows, as all booster compressor SD VOCs are confing due in 2011-13, K-930 packing VCC leak, however, is still aniffing above the 500 ppin limit (aniffed on 3/2s at 3/20ppin). K-940 is correctly unavailable due to mathlemance, and should it not return to service before K-930 must be stul down to repair VCC leaks, the North's ard must cut ground 30 MMSCFD H2 consumption.	K-830 Pecking Yent VOC Leak. Patential Production Loss due to VOC Leak Repair Deadline	Near L	Closed	3/25/2011 12:00:00	Rickmond, CA . 11013 Refinery	11013
(1) Defective te-down ratchet handle.	injury/iliness	Contact employes was securing equipment to flathed truck with rechet style tie-down straps. The rachet handle snapped back contacting the employee on the front tooth, impect resulted in a chipped tooth.	Chipped toath	Loss	Closed	3/30/2011 11:00:00 AM	Richmond, CA - Refinery	11009
(1) Lack of knowledge/training about writing What for parts ordering only. (2) Inconsistency in past situations and in different ABUs with both RER and technical OAs in regards to managing projects and ordering for large equipment repairs that will be completed on the run.	NL-Operational Process/Procedures - Plant Run Out/Slow Down	Rolor blades for TK-550 were not urdered for over a month despite a high sense of urgency due to the high likelihood TK-550 would fail.	Delay of ordering TX-550 replacement blades for an emegent repair	Near r	Closed	1/17/2011 12:00:00 AM	Richmond, CA -	11004
(1) Employee not aware of suroundings, did not conduct a 350 awarness.	Damage - General Liability	nolicing that another emptyose had parked behide him. The truck was not visible and he backed into the passanger side of vehicle. No one was hurt.	мус	Lost	Closed	11:46:00 AM	CA - 11003 Refinery	11003

	T		<u> </u>	Ι	Ι	Γ	ſ	1	ı	ı		1	1	_
	11482	11439	11429	11415	11412	11410	11370	11352	11352	11250	11241	11221	11221	11219
	Richmond, CA - Refinery	Richmond, CA - Rofinory	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Resinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Retinary	Richmond, CA - Refinery	Richmond, CA - Refinery	CA - 11219 Refinery
	4/6/2011 8:00:00 AN	4/5/2011 3:00:00 PM	4/5/2011 9:30:00 AM	4/1/2011 12:00:00 AM	4/4/2011 12:00:00 AM	4/4/2011 4:00:00 PN	2/8/2011 12:90:90 AM	4/4/2011 11:45:00 AN	4/4/2011 11:45:00 AM	4/1/2011 1:00:00 PM	4/1/2011 5:CO:DO	3/31/2011 12:00:00 AM	3/31/2011 12:00:00 AM	12:00:00 AM
	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
<u> </u>	Loss.	L Nost	L OSS	Coss	Near Loss	Near	Loss Near	Loss	Loss	Loss	Near Loss	Near Loss	Naar	Near
	Green Card - Nearly Knocked Semeane Down	Temporary shutdown of gasoline blender	Confirmed internal and External Odor Comptaints From 6" Ballast Line	Near total radio communication loss at Firehouse.	Racio Interference Issue	Insect bites	Delay in RLOP Lab Reconstruction	Rt technicien rolled ankle white stepping over pipe	Rt technicien rolled ankle white stepping over pipe	T-1637 Sales Tark Exceeded Safe Oil Hieght	K-950 tripped on Low Lubs oil pressure	Outside Frequency interference is occurring	Outside Frequency Interference is occuring	Radio sytem in Refinery outage
While delineationing T3126 of figures in preparation for tank turnaround, degassing contractor pulled liquids into their temporary exhaust ducting installed on a root vent on the tenk. This necessitated abpling deinventoying activities for a few hours to clean and replace the affected decidents of ducting on the root. Liquids were sucked into the ducting because the degassing confractors therein oxidizer was in operation and pulling vacuum in the ducting while the footing root was sill resting on Replid. It is a common practice to start degassing serly so that exhaust from the vegor space will be confined to the moment has root is branded, in completence with BAAQMD regulations, but the intent is to time this early start to just prof to when the root	Green Card - As someone was exiting their office without looking they nearly knocked a co-worker ever.	Mechanic working on VOC leaker developed a plin-hole size leak on a bleader valve connection spraying a small amount of gasotina to the almosphere.	Dræning 6' Ballast line al flange to a vecsam truck with scrubber (liquid alive). under 580 Odors generated from draining line to a kitty pool.	Poor Quality of phone lines created near outage of Centrol Radio Controler in the Firehouse. Got report of poor communication.	Radio system sesing on channel interfering eignal. If strong enough could ceuse radio system to bacome unreliable.	Employee noticed eaveral insect bites tocated on his arms and head this morning. May have been the mosquito he killed late in the anemoon the previous day.	LOP de be	assistant was carrying carners and equipment, the side stepped over an existing time to cross over it. When he stepped over the plecad one fool on a rock. This rock moved when weight was put on it and the assistant colled his anide	assistant was carrying camers and equipment. He side stepped over an existing lime to cross over it. When ha stepped over he pieced one foot on a rock. This rock moved when weight was put on it and the assistant rolled his anido.	T-1937 Automatic III system faed and the tank exceeded Safe Oil nieght. The automatic III system is being controlled with an L&G level gauge system which is prone to failure because of moving parts.	Al approximately 05:00 am at shift change the K-940 compressor crew called operations to left them the tube of filer for K-950 was spraying oil from the top gasket on filer K-951. Operations awtiched filers and the compressor shudown on a transtent fow tube of pressure. The compressor was restarted firmmediately and baded up with no impact to the operating units.	Seeing on channel interference from system outside the refiney, or a radio within the refinery. Yet are continuing to look for the problem and tracking the Interference. This problem can busy the system and make it hard to use radios reliably.		The copper wires betwee the radio control in Firehouse and the communication system on high hit experienced enother near outsige.
	Nt-injury/ilkness - Employes injury	NL-Operational Process/Procedures - Plant Run Out/Slow Down	NL-Environmental - Release	NL-Operational Process/Procedures - Safety Systems	NL-Operational Process/Procedures - Safety Systems	NL-Injury/Illiness - Employee injury	NL-Quality - Product Quality (Int)	injury/iline5s	NL-Injuryก็ที่กลรร - Contractor Injury	Environmental	NL-Operational Process/Procedures Sately Systems	NL-Business Process - Business Interuption	NL-Operational Process/Procedures - Sately Systems	Process/Procedures - Safety Systems
			(1) Leok of overalght or supervision					(1) technician felt pressure to complete job quickly	(1) technician feit pressure to complete job quickly	(1) Mechanical failure	(1) SOS; Maintenance & Inspection; K-960 Spraying Oil, Lube Oil leaking from the filter (pt.) section. Bed O-ring, Wear and lear Over Time. (2) SOS; Training & Procedures; K-980 Spraying Oil. Operater existence flow to the leaky filter. Didn't Look Closely at the Handle to see which way the flow was going. Switch Velve's enrow shape can be misinterpreted for position herication versus flow indication, (3) SOS; Training & Procedures; K-960 Spraying Oil. Operator switched flow to the leaky filter, Was A skeed by Mechanics to Switch Filters, Mechanics Didn't Look Closely at the Hendle to see which way the flow was sping. Switch Valve's smow shape can be mishriterpreted for position indication versus flow indication.			

	11540	11621	11602	11542	11542	11539
~	Richmond, CA - Refinery	Rehmend.	Richmond, CA - Refinery	Refinery	Richmond, CA - Refinery	Richmend, CA -
	4/7/2011 6:15:00 PM	4772011 8:55:00	4/7/2011 9:30:00 AM	4/6/2011 2:00:00 PM	4/6/2011 2:00:00 PM	4/6/2011 8:15:00
	Closed	Closed	Clased	Closed	Closed	Coo
	- Coss	Cos	Loss	Loss	Loss	Coss
	Possible flangaleak at piot limit, discovered while bypassing V-3211	SRU #2 & #3 trains tripped off ling.	Sub Contractor Iripped over a place of rebar and punctured his large	Operator felt peln in right hand white opening block valve.	Operator felt pain in right hand while opening block years.	Liguids puted into
P-3251's level controller (FC-021) needs to be pulled and sent to the shop for repairs. Two stempts at Isolating and removing valve from service have been unsuccessful due to major leak by on the controller's isolation valves and both	P-3231's level controller (PC-Q2) heacts to be pulled and sent to the ship for repairs. The alternyls at slocaling and remnoid ny take from service have been unsuccessful due to major teak by on the controller's Isolation valves and both pump discharge check valves and discharge block valves. Plan was to bynass v-3211 discoing steams to V-1715 (separation/degasses) in the crude units often up associated plying their release to maintenance for valve relptecement. Estimated total time of v-3211 being byparsed would be approximately 48 ins. During bypass operations responded to an odor carning from 4 Corude's Plot Limit. Upon arrival, operations noticed a possible pipe/flieng teak coming from block coming from a Corude's Plot Limit. Upon arrival, operations noticed a possible pipe/flienge teak coming from block at 4 Crude Plot Limit.	Loss of 2 8.3 SRU trains. Operators were opening the parallel block valve on a back done roscore steem line in the FCC when a sudden drop in SRY 8,3 SRU's header pressure a loss of thorsepowers resulting in both #2 6,4 SRU's back on ot bower tips on flow DP. The operators immediately blocked in the steam value formatic lossed position) then returned to the units to execute loss of train steatization procedures.	White off loading a truck with rebar, the forkift operator ran over a stick of #4 rebar laying on the ground which was pencilel to fin truck. As a result, the rebar popped up causing the ground person to trip and fell puncturing his knee on a rock.	Operator was de-LOTO'ng P-1411 and puting the pump in service when they feit e sharp pein in bein right hand. They came into the control room and cated plant protection to evaluate.	Operator was de-LOTO'ng P-1411 and putting the pump in service when they left a sharp pain in their right hand. They came into the control room and called plant protection to evaluate.	lands to firnt the time vectum is policed on liquid rather than vapor space. The tank's normal level indicator was known to be questionable, a tink level was being estimated with altomate methods, including having possiblors manually measure the level that an end goliting an infrared load statistic because the atternate information indicated root was close to "high test height and root funding was information indicated root was close to "high test height and root funding was inminient. Following the discovery of kiquid in the ducking; the test height was remanatured menually using a rigid stifict gauge. The new measurements confirmed that the stark level was a scalarly over 2 feet above the point where root legs would land. Since root landing was not imminent, the degreese ended up pulling too log without a vection of the ducking. The factor is inadequate tools or seulphone (factor) and know here to the ducking. The factor is madequate tools or seulphone (factor) and know in the factor of the was a known factor at the
	NL-Environmental - Operational Leak	Operational	injury/iiness	kijugAliness	NL-injury/lineas - Employee Injury	NL-Business Process - Business
	(1) Equipment falled due to enviroment	commissioning an ellemake Sobal seams supply line for back up usel in proparation for a pierread maintenance (b) in the FC by lying the SCU lin-plant 450# steam haf to the Y faid 500# sleam supply line for back up usel in proparation for a pierread maintenance (b) in the FC by lying the SCU lin-plant 450# steam haf to the Y faid 500# sleam haf. When his SCU operations began opening the Y lump over block valve to the fire parallel lines together, a sudden drop (pressure & flow) in the SCU 450# steam haf occurred which caused an immediately backed in the Jump over valve (normal closed position) han returned to the plant to execute plant stabilization procedures for loss of both hains, 2100 train remained on-line, May 1. Both train trips are linitiated by low will differential FSC (rips Why 2 - Both TG blower lindings) you will differential FSC (rips Why 2 - Both TG blower lumbres were blink this slugs of condensate which significantly slowed both turbines Why 3 - Steam supply to both TG blower lumbres were blink this slugs of condensate which significantly slowed both turbines Why 4 - Accurrudated condensate was slig present in the stagnant steam header being placed in service when the two heter were opened up to each other. Why 5 - Several condensate traps on the stagnant steam had so were not checked by operators to confirm all condensate was stagned as not be in working order and also were not checked by operators to confirm all condensate was stagned as not be in working order and also were not checked by operators to confirm all condensate was stagned as not be in working to each other. Why 5 - Several condensate traps on the stagned store deated by operators of confirm all condensate was stagned as not because of the stagned was stored to a not be in working order and also due to a noticipate steam from parallel hid work down towards SRU from Y and 500# steam had standed to the stagned with the Pot-1 and planning HSE. Why 6 - Not enough a stafficing types in to taly recognization the risks before	(1) Crew did not remove the excess rebar from the working area.	(1) No cause found. Potential use of body mechanics.	(1) No cause found. Potential use of body mechanics.	

At 2.25 sp, 411N, a flange off of the P-105A bypess fine began to leak hasped of the P-105A bypess fine began to leak h	(1) SOS: At ~ 2:45 am, 4/1N, a flange off of the P-105A bypass line began to leak At ~ 2:45 am, 4/1N, a flange off of the P-105A bypass line began to leak At ~ 2:45 am, 4/1N, a flange off of the P-105A bypass line began to leak Analysis CA - 2:40:00 Conditions to almosphere coating surrounding piping, Leak was Conditions forge back Analysis Conditions forge back Inditions forge back Analysis Conditions forge back Inditions	(1) SOS: A1 ~ 2.45 sm, 4/11N, a flange off the P-105A bypass Ins began to leak A2 + 2.45 sm, 4/11N, a flange off the P-105A bypass Ins began to leak A2 + 2.45 sm, 4/11N, a flange off the P-105A bypass Ins began to leak A3 - 2.45 sm, 4/11N, a flange off the P-105A bypass Ins began to leak A4 - 2.45 sm, 4/11N, a flange off the P-105A bypass Ins began to leak A5 - 2.45 sm, 4/11N, a flange off the P-105A bypass Ins began to leak A6 - 2.45 sm, 4/11N, a flange off the P-105A bypass Ins began to leak A6 - 2.45 sm, 4/11N, a flange off the P-105A bypass Ins began to leak A7 - 2.45 sm, 4/11N, a flange off the P-105A bypass Ins began to leak A6 - 2.45 sm, 4/11N, a flange off the P-105A bypass Ins began to leak A7 - 2.45 sm, 4/11N, a flange off the P-105A bypass Ins began to leak A7 - 2.45 sm, 4/11N, a flange off the P-105A bypass Ins began to leak A8 - 2.45 sm, 4/11N, a flange off the P-105A bypass Ins began to leak A8 - 2.45 sm, 4/11N, a flange off the P-105A bypass Ins began to leak A8 - 2.45 sm, 4/11N, a flange off the P-105A bypass Ins began to leak A8 - 2.45 sm, 4/11N, a flange off the P-105A bypass Ins began to leak A8 - 2.45 sm, 4/11N, a flange off the P-105A bypass Ins began to leak A8 - 2.45 sm, 4/11N, a flange off the P-105A bypass Ins began to leak A8 - 2.45 sm, 4/11N, a flange off the P-105A bypass Ins began to leak A8 - 2.45 sm, 4/11N, a flange off the P-105A bypass Ins began to leak A8 - 2.45 sm, 4/11N, a flange off the P-105A bypass Ins began to leak A8 - 2.45 sm, 4/11N, a flange off the P-105A bypass Ins began to leak A8 - 2.45 sm, 4/11N, a flange off the P-105A bypass Ins began to leak A8 - 2.45 sm, 4/11N, a flange off the P-105A bypass Ins began to leak A8 - 2.45 sm, 4/11N, a flange off the P-105A bypass Ins began to leak A8 - 2.45 sm, 4/11N, a flange off the P-105A bypass Ins began to leak A8 - 2.45 sm, 4/11N, a flange off the P-105A bypass Ins began to leak A8 - 2.45 sm, 4/11N, a flange off the P-105A bypass Ins began to leak A8 - 2.45 sm, 4/11N, a flange off the P-105A byp	Green Card - potential loss of productive time. The IIF 2O posetive event	Green Card - Helle is a wooden handreil on the steinway leading from the Firehouse to the parting for parting for access the street. On the handreil here is a nati Freehouse to the parting for parting for access the street. On the handreil here is a nati Freehouse to the parting for parting for parting for parting for parting for parting for a hard inch on the right handreil is you go CA - 3:20:00 Near Green Card - Hell elicking down the state is the with a nati and raccord my hand, firm worked that others may Nu-injury/liness - Common the state is the parting for the state is a nati Freehouse to the state is a nation of the state is a nati Freehouse to the state is a nati Freehouse to the state is a nation of the state i	Green Card - Nell stocking on the stain on t	allowing al	Mistras, EE was fiside of the 2000 H78SS manway 8N performing inspection duties using a letteraphra pale to mise a common, Mistras, EE was fiside of the 2000 H78SS manway 8N performing inspection of the account of the sections of the performance of the perform	P-3251's lived controller, (FC-021) needs to be pulsed and sent to the stop for important to the stop for its formation of the stop for in the cude unit. Canada	CA- 6.15:00 limit, discovered while Limit. Upon entirel, operators noticed a possible phonitongo teak coming from Injury/liness (1) Equip Refinery PM Closed Loss bypassing V-32:11 below grade at 4 Crude Plot Limit.
(1) SOS: Design & Engineering: Diz of Equipment: Valve imalerial felted in this service, (2) SOS: Malintenance & inspection, https://doi.org/10.1001/1	(1) SOS: Design & Engineering: DE of Equipment: Valve material fatled in this service, (2) SOS: Maintenance inspection, trapection and Toeing: Finge is not inspected maintained appropriately, Fange is not on a Preventative Maintenance Program, (3) Sideber SOS: Training & Proceedures (Process Saléty information): History brief for P 105N was found to be incorrect.	(1) SOS: Design & Engineering: D/E of Equipment: Valve material failed in this service, (2) SOS: Maintenance & inspection: httpsection and Testing; Flange is not inspected/maintained appropriately. Flange is not on a Preventalive Maintenance Program. (3) Sidebar SOS: Training & Procedures (Process Safely Information): History brief for P. 1054 was found to be incorrect.				(1) 1) Why did diede (no) fai? About (astenes: came loose allowing wings to fret and ground?) Why did the fasteners come loose; they were not properly (ightened and/or no loose, they were not properly (ightened and/or no look washana/octife was used curing assembly?) Why were stateners not properly tightened? no written procedure available for assembling didde ring anto motor rotor. 4) Why is through one procedure? In the past three has never toon a procedure available and a failure of this type has nover cocurred.	(1) Improper tool for the job., (2) fnadequate Iraining on tool being used	(1) Equipment failed dus to saviroment	(1) Equipment failed due to environment

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	12224	12157	12157	12101	12077	12057	12045	12038	†1881	11875	11873	11851
	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA Refinery	Richmond, CA - Refinery	Richmond, CA - Refinary	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery
	2/19/2011 12:02:00 AM	4/17/2011 12:15:00 AM	4/17/2011 12:15:00 AM	4/13/2011 4:15:00 PM	4/12/2011 10:00:00 PM	4/14/2011 8:00:00 AM	4/14/2011 12:00:00 AM	3/23/2011 12:00:00 AM	4/11/2011 12:00:00 AM	4/12/2011 11;00;00 AM	4/6/2011 12:00:00 P&I	4/12/2011 5:23:00 AM
	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Ciosed	Closed	Closed	Closed	Closed
	Loss	<u>8</u>	Loss	Loss Near	Near	Coss Near	Near	Loss	Near	loss	Loss Loss	Loss
	C-1400 Flooding Leading	particle in the eye	particle in the eye	green Cerd-Fan Stades Broke Off, Equipment not LOTOed	Plant shipped sour water Pulant shipped sour water rounds off fiest due to high concentrations of ammonia	Employee felt abdominal pain most of the morning	Condensate sump pump not working, overflowing hot condensate to grade	During a JP8 load on the Nississippi Voyager 1st ins showed signed of particulate and water contamination	Loss of P-56 Vibration Monitor	Sub-Contractor (BCI) slipped in some gravel causing him to fall and injure his left shoulder.	Green Card. No working telephones within the facility.	Employee rolled ankle while walking from Crew van to turnstile
Green Card - Vehicle (appeared to be a black Dodge Caliber) travelling at	C-1400 rate limits addressed in February due to flooding that was occurring in lower trays of column. Overall Alky plant rates were limited and a Pil abp was planned to address the flooding issue. Repairs in this area of the column had been done during 420:010 shufdown so there was a chance there were issue on the column associated with shufdown work; When the occurnn was opened nothing was found that might be a root cause to the flooding. Recommendations for changes inside the column were made by our distillation expents to prevent flooding. Upon startup no flooding issues at largel high rates have been seen.	Capital Projects P2s contractor employee was grinding on some baffe piales in 1-2000 when he felt some kritation is NS eye.	Capilal Projects P2s contractor employee was grinding on some beine plates in 1-2000 when he left some imitation in 145 eye.	Green CardBlades on exhaust fan broke off and lodged in guard, Equipment not tegged or de-energizee and if switched on could have dislodged blades creating a projectie hazard.	The slipped sour water was tested in the field leb at 20:00 with a 35 ppm NH3 result. Steam was increased to C-820 to help stip the NH3 out of the water. At 22:00, the stripped water was tested again with the number over 100 ppm.	Emphyee reported having a sharp pain in the lower left groin area.	Condensate pump south of V-283 not working. Hot condensate is overflowing making access to the pumps incrardous. EE's are using wood planks and pallets for access. Maximo was written for pumps repair. Need staging for the intermediate time.	During the loading process of the Allssis-sppi Voyager V133 Chevron speations observed JP8 samples that failed workmanship on 1st ins samples on 6 of 8 vessel compariments.	Lost the ability to operate the Adops thender using P-SB as the Mogas Elender boosts pump. This loss accounts for a significant loss of rate from the Mogas blender to finished product tankage.	White clearing up wood and other form materials inside a nexty constructed reactor, a 3CI employee slipped in some gravel white carrying a couple pleess of wood. This loss consisted of a 4x4 and a 4x8 approximately 7 long. When he fell, the contractor landed on the loss sylving his left shoulder.		case (contractor triangle was maxing and only the Saloniany base was in place). Employee ordied right ankle, situmble foil eithing ig lick free on asphalt and boffore coming to rast on right afde. The employee felt path in right ankle and was helped by co-worker to small building near turnsitie #53.4 call was made to CFD requesting EMTs to envaluate employees condition. A call was made to on this \$11, Q3-2327. Following CFD reviews temployee was trained to on this \$11, Q3-2327. Following CFD reviews temployee was trained to the splital was AMR services for medical follow-up.
	Business Frocess	injury/liness	NL-Injury/liiness - Contractor Injury	NL- Equipment/Property Damage - Equipment Damage	NL-Dustry - Product	NL-injury/iliness - Employee injury	Nt Equipment/Property Damage - Equipment Demage	Quality	NL-Business Process - Business interruption	injury/lifness	NL-inj.ry/iliness - Employee injury	injury.iiness
	(1) Original column design of tiquid down comber dearance wear't high eneugh to allow internal reflux at high unit feed reles.	(1) Restricted work space	(1) Restricted work space		(1) Why was the SSW routed off test - High in HH3 concentration. Why was the SSW high in HH3 concentration as the MH3 concentration in C-810 was dropping during the day - Because C-810 in the MH3 concentration in C-910 dropping during the day - Because C-810 in yet of Confroiler put in auto - Because no one had communicated to the operations not loues it and it had not been removed for the control setherns. Why was this communication to the operations not not use it and it had not been removed for the control was not the owner of the plant; therefore, this action was not they owner of the plant; therefore, this action was not high on priority list Why - no clear owner of plant was assigned at the time of the incident.			(1) Missistipal voyager loading spling and compartment configuration to not allow for effective chening and inspection according to military standards. This increases the optical is conteminate JPB with particulates, water, and/or prior cargo. (2) Micronic Fallustion on 16° fine is not compliant with E1 1560 or E1 1566 for micronic filter elements and filter vessels respectively. This could have contamination was not definitely identified, Though the documentation strongly suggests that the contamination was not definitely identified. Though the documentation strongly suggests that the contamination was for definitely identified.		(1) Controlor slipped and fell on toose gravel due to complecency end a unbelanced load.	(1) wind and rein caused tree to fall on phone lines, (2) wind and rain caused tree to fall on phone tines	(1) Employee did not look for wasting hezard as he exited the van., (2) Partially disassembled delineator base left a tripping hazard.

	NL-injuy/ilinese - Employee injury	Green Card. There continues to be use of cell phonos white driving in the Retinery. This topic was discussed in our work group and saverel had reported seeing this, (coation; DAR)	Green Card, Call phone use while ddving	Naar G	Closad	4/21/2011 2:30:00 PM	Richmond, CA - Refinery	12473
	NL-Transportation - Company	Green Card - Observed Driver of Marcon Cer Talking on cell phone while driving on Center Street near Method intersection.	Green Card - Telking on Call Phone while driving	Neer G	Cloud	4/21/2011 11.50:00 AM	Richmend, CA - Refinory	12467
	NL-Transportation - Contractor	Green Card - Observed Driver of Marcon Car Taking on cell phone while driving on Center Street near kidway (thersection,	Green Card - Talking on Call Phone while driving	Naar Coss C	Closed	4/21/2011 11:50:00 AM	Richmond, CA - Refinery	12467
	NL-Transpodation - Personal Use	Green Card - Observed Driver of Marcon Car Taking on cell phone while driving on Center Street near McKway intersection.	Green Card - Telking on Call Phone while driving	Near G	Closed	4/21/2011 11:50:00 AM	Richmond, CA • Refinery	12467
(9) 1. Why did "problem" occur? Workers & Field Continuction Rep Their percent plant areas. 2. Why did "I" happen? Training & RI-114 relations that Inged to wear FRC in process plant areas. (white lined), 01 Gale training and RI-314 do not clearly address issue of FRC in pipeways or areas around process plants. 3. Why did "2" happen? 91 Gale Training and RI-314 do not clearly defined to conduct a case-by-case risk assessment Bideber. Why did "2" happen? RI-314 does not have a clearly defined exception process 4. Why did "3" happen? Prior it is assessment was focused on FRC and process plant areas due to previous incidents. (2) 1. Why did "problem" occur? Workers & Field Construction Rep had perception that tidd not need to wear FRC outside of process plant areas. 2. Why did "1" happen? Training & RI-314 do not clearly address (white lined). 91 Gate training and RI-314 do not clearly address (white lined). 91 Gate training and RI-314 do not clearly address (white lined). 91 Gate training and RI-314 do not clearly address (white lined). 91 Gate training and RI-314 do not clearly address (white lined). 91 Gate training and RI-314 do not clearly address (white lined). 91 Gate training and RI-314 do not clearly address had a "2" happen? Training and RI-314 do not have a clearly clearly address a need to conduct a case-by-case shak assessment.	NL-injury/iliness -	Green Card - I observed two contract workers performing survey work w/o Fire Resistant Clothing (FRC). I approached them and asked them about their FRC and they were unware of the equirement. Leafled their field construction rap who stelled they green the read. They were working in the road. They were working in the road. They were and working to the road and their focation was always changing as they were and working for some cable installation. In other words, they were not a short term visitor, they were ascorted by a company rep and they would be doing work at times read our pipeweys and process plant bey would be doing work at times read our pipeweys and process plant bey faill.	Green Card - Survey Work (no FRC)	Noar G	Closed	A/20/2011 10/50:00 AM	Richmond,	12461
	NtBusiness Process Business Interruption	For the field 2G+ years the communications cable between the fire department dispatch center and the High Hill repeater site has time fosse causing the dispatch center and the High Hill repeater site has time fosse causing the spatch center to unknowing loose of the ability to communicate on the system. Units call into the dispatch canfor and the sudde signal due to communications fine loss fails to reach the dispatch consol. Field units call and the dispatch remarks to the system units call and its dispatch canfor.	Loss of radio system due to bad cable from dispatch to High Hill	Loss to	Closed	4/21/2011 7:10.00 AM	Richmond, CA - Rofinery	12456
(1) Unknown	NL-Business Process - Business Interruption	Lost power to GMG Office Facility. A plastic trash can was placed 2' from electrical switch, the wind blaw if open and down on switch moving it from on to off position causing loss of power to building	Lost power to building. Plastic trash can was placed 2' from size switch, which blew lid open and down on switch moving it from on to off position.	Coss P P P C	Clased	4/20/2011 3:50:00 PM	Richmond, CA - Refinery	12405
	NL-injuryiliness - Employee injury	Grean Card - Pedestrian bridge near Building Permit Services has one plank slicking up. Employee almost lost their footing.	Green Card - tripping hazard on wooden bridge	Maar G Loss h	Clased	4/16/2011 12:00:00 PM	ļ <u>-</u>	12401
	NL-injury/iliness - Contractor injury	Green Card - Pedestrian bridge near Building Permit Services has one plank slicking up. Employee aimost lost thair footing.	Green Card - tripping hazard on wooden bridge	Loss P	Closed	4/18/2011 12:00:00 PM	Richmond, CA - Refinery	12401
(1) Why did the operator strain his shoulder - Strained should because he lost his fooling. Why did the operator loss his fooling. He lost his fooling because he was not concentrating on the lask of descending the ladder.	ไก _ไ บารู/กิเลตรร	As operator was descending ladder at E-551, his foot slipped and as he caught Nimsett he felt a pain in his left shoulder	Operator strained left shoulder descening ladder.	28 C	Closed	4/20/2011 9.30:00 AM	Richmond, CA - Refinery	12385
	NL. Equipment/Property Damage - Equipment Damage	Vehicle contacted the outrigger of a light plant, No damage,	1601	Noge 1	Closed	4/18/2011 4:05:00 PM	Richmond, CA - Refinery	12262
	Ni,-Injuy/ilness - Employee injury	Grean Cand, Duning a building evacuation at the caldedd, nobody was assigned to secure doors and prevent someons from entering the building. Everyone was at evacuation location, I stopped comeons from entering the building just because I happened to be stending in the vicinity. Location: Tech ontiding just because I happened to be stending in the vicinity. Location: Tech ontider. Cathoric	Green Card. During an evacuation, notody was essigned to secure doors	Near S S G	Closed	4/13/2011 9:30:00 AM	Richmond, CA - Refinery	12236
	NL-Transponstion • Personal Use	appioximately 25-30 mph drove into Cafetenta parking lot from direction of Main Gate and parket. Assumed to be a personal vehicle (no signs showing affiliation with any company), NOTE - posted appeal minto nool from Main Gate is 15 mph; posted speed inful in Cafetaria parking lot is 5 mph.	Green Card - Vehicle Speeding	Near G	Closed	4/18/2011 12:45:00 PM	Richmond, CA - 12235 Refinery	2235

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	12850	12548	12547	12525	12519
Richmond, 423/2011	Richmond.	Richmond, CA - CA - Relinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA. 12519 Refinery
4/23/2011	4Z2/Z011	4/23/2011 10:30:00 Atd	4/23/2011 10:00:00 AM	4/21/2011 1:38:00 PM	Richmond, 4/2/2011 CA - 6:21:00 Refinery AM
	Ciosad	Closed	Closed	Chosed	Clased
	ू इ ; इ	Coss	Near Near	1088	Loss
T-2000 - 13.8ky bus deared when (CGT-2000)	#3 GRU tipped	Neer Miss, contact with 120V electrical vector	Improper PPE inside of a	Security Officer was returning to Gala et al Guard Shack all evit side when Gala arm was activated by a driver daparting retirany. Gate arm tising caught the sleave of Officer shirt and broke of the Sofficer attempted to get free orf gate arm.	Power drop from PG&E caused SRU train trip and misc. equipment trips.
1-2000 - 13.8W bus cleared when (CGT-2000) 13-4 Breaker dozed during start-up. 1.) Started CGT-2000 per start-up procedure. 2.9 Firsh-in CGT-2000 @ 2133/is., 3.1-2000 Centerating Beaker, 13-4 Clossed into 13-8W bus @ 1233/is. 4) @ 1000 Centerating Beaker, 13-4 Clossed into 13-8W bus @ 1233/is. 4) @ 1233/is. Phase 8 Bus Diff (8/1, T. & SI) activated causing the 13-8 bus to port all breakers. 5) Breakers that Opened: 13-2 Transformer Bereaker. This isolated the 13-8 bus from 1150v system. 13-10 Beaker to TX-454. This solated the 2.4W bus at Cogen PCC. Pluges, 13-12 Breaker to 10-12-458. This solated the 480v bus at Cogen PCC. This solated the 2.4W bus at Cogen PCC. This solated the 2.4W bus at Cogen PCC. This solated the 3.0W bus at Cogen PCC. STGS801/MCC. This caused the loss of the oil pump to TG-800. When the STGS start beak-up of pump came on films, this in turn sent at this signal and S/D TG-800 opening 13-30 Beaker, 80PC285 Emergency 8000 to 1504 Leddown wave Opened to control the 1504 starts system. This is done automalically when TG-800 Tips. 13-18 Breaker to TX-448 to 137 TL, to 12-18 Breaker @ #1 when TG-800 Tips. 13-18 Breaker to TX-448 to 137 TL, to 12-18 Breaker @ #1	SRU # 3 tran tripped off the when the refinery excertenced a power surge (see L. J. #12519) The will bipped of which both file-gyes on F-2330 ghutdown. This should not have bappened being that one of the fre-eyes is on a UPS. Investigating into the election started.	Chevror. Et was working on fire eye 829 on log of the combustor for 17-2003, when EE inabbartently made conlact with a 120V electrical tracing causing it to are upon contact with a handrall support. EE was working in a way restricted and confined area and the tracing is not vasable from above (coaded about 87 above and was handrall pelecy the pipe. Not highly occurred but IEE had a way deep concarn due to the very close presimity of their arm and body to the erc. Unable to determine how long the stering was in to this condition but end was seated by \$10 abscrides in to prevent a future Incident.	Tent: EE was standing outside of the HRSG 2000 enclosure within the Crembic Fiber laped area scalabilished for materials being installed incide with a respirator but not wearing any tywas. Five Mantabili on-site to sign a tortion Source Permit notional this and confidence Operation and myself to question the permit notional this and confidence Operations and myself to question the procedures and that tywas is a required part of the PPE to be in the cross of procedures and that tywas is a required part of the PPE to be in the cross of the area of the procedures and that tywas is a required part of the PPE to be in the cross of the permit of the procedure of the permit of the procedure.	At the above time, date and location the Orticer was returning to Gaile 91 (Quard house via furnistia T-31 star picking up some "pink cards" from Pass (Contol). As he crossed the street in front of the exit side barrier arm, he stapped between the barrier arm and a stopped vehicle welling to 'bedge out." Just as the Officer shopped to the inside of the barrier arm, the driver walling to exit suped between the start in the street was starting to exit sand the gate arm raised, catching the steeve of the Officer's shift as gate raised towards the "open" position, As the Officer shift as the towards the "open" position, As the Officer shift as the token of the Officer shift as the token of the Officer was not injured and the only damage was the broken wooden gate arm.	PGEE experienced flesh damage (cause unknown) to transmission tower 17/104, resulting in a power drop on the Sobrabe #1 fine into the refersey. This crop caused in transmission flesh #182 and #882 at SOSS to open. The open breakers likely resulted in the plans #182 and #882 at SOSS to open. The open breakers (likely resulted in highing an SRV (tash, bone hydroprocessing equipment, DWOP pumps, and possibly other missellaneous equipment.
NL-Operational	Operational Process/Procedures	NL-injuryiliness - Employee hjury	MOperational Process/Procedures - Safety Systems	Equipment/Property Demage	Operational Process/Procedures
	(1) Why 1: The FSC ordered the life (carnetly per its programming). Why 2: The war offer systs on F2320 showed list litter was no flarer in libe himsed for 5 secures. Why 3: These was a inpatite was no flarer in libe himsed for 5 secures. Why 3: These was no flarer in USE. There is a separate incident investigation for this. Why 4E: The UPS should have supplied backup power to one of the fire ayes, but did not. Why 5: The UPS was plugged into the wrong power outlet (an outlet on the seme circuit, not to the UPS taltery). Why 6: It is unclear whan the UPS was urplugged incorrectly, possibly during the SRU &3 Shuldown. The power supply was not clearly hebsted and the PM for checking the baltery and condition of the SRU &3 Shuldown. The power supply was not clearly hebsted and the PM for checking the baltery and condition of the SRU &3 Shuldown. The power supply was not clearly hebsted was no facer in the formact for 5 seconds. Why 2: The PM of the SRU &3 Shuldown. The power roll have supplied backup power to one of the fire syes. Why 4: The VPS was unprugged into the wrong power outlet (an outlet on the safte circuit, not to the UPS satisfay.) Why 6: It is unclear when the UPS was unprugged incorrectly, possibly during the SRU &3 Shuldown. The power supply was not clearly beated and the PM for checking the baltery and condition of the SRU &3 Shuldown. The power supply was not clearly beated and the PM for checking the baltery and condition of the Maximo.			(1) Officer waked within the operating erea of the moving barrier arm because there were not markings to show Officers that the operating area of the barrier arm is an unsate area.	(1) PG&E feeder short

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 12859	12857	12855	12829	12813	12798	12794	12634	12631	12629	12592	12559
Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Rafinary	Richmond, CA -	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	12559 Refinery
4/21/2011 8:00:00 AM	4/27/2011 3:20:00 PM	4/27/2011 3:00:00 PM	4/27/2011 8:56:00	4/26/2011 11:00:00 AM	4/26/2011 8:00:00 AM	4/21/2011 2:00:00 PM	4/22/2011 12:00:00 AM	4/23/2011 12:00:00 AM	4/23/2011 12:00:00 AM	4/24/2011 3:30:00 AM	AM
Closad	Closed	Closed	Clased	Closed	Closed	Closed	Closed	Closed	Closed	Closed	C10880
 Loss No ar	Loss	68	Loss	Near	Near Loss	Noser Noser	Naar Loss	Near Loss	Coss	Loss	Loss
GHT F-1860 Burner Cleaning Caused Brief Decrease in Heat Input	21 pump station, across from health quest	Vecuum Truck Foamed Over	Filare activity while blowing down equipment to relief system	The turniable on the stretchwrapper at door B was lifted or knocked off of its base with a forbidt.	Green Card—Gap in Concrete	Green Card-Contractor vehicle ran three stop signs	Green Card, Missing Bakeille tags	Green Card, Silppary combo of new paint and oil on booster deck		Shut down of FCC by	Sian-up.
A burner cleaning activity at the GHT F-1050 furnece ted to a brief decrease in feet input of the GHT SHU and HDS reactors. Higher then normal merceptans were found in the GHT product Steam F-1560 nars with Sumers in sender out of 4, and burner cleaning coupled with plugging in another burner set limited the capacity of the F-1560 to provide enough heat to the reactor system.	es was receiving nins foot metal scaffold plank from his partner in crew, when the plank was positioned upright so that he could grab it there was some debths that came of plank and went hole left eye. The debts might have been stuck in small charinsi on the bottom part of steel plank.	Drahing exanded 7 Chg pipline to a bin (heavy type gas oil meterial), when malerial changed from heavy gas oil meterial to a light cutter type material shuddown draining line to the bin and changed the connection to the recum fluck onalls to execute the line. When draining the 7 chg line to the vacuum fluck onalls to execute the line. When draining the 7 chg line to the vacuum fluck twan filing to fast, so the block valve on the 7 chg was pinched down to slow the drop to the fluck. The vacuum fluck feathed over.	While removing (blowing down) had condensate from the process side piping in E181 (C16D Debtachezer debtief) to the blowdown header (Itomic Leaused the propane already in the blowdown header (Itom the V283A safety) to vaporize sending a sudden flow to the faze. Why did we have liars activity? There was a sudden flow of propane to the FCC offer from the FCC cride system. Why was there as sudden flow? The bowering on E-181 reboiler needed to be blowing down the bot condensate halt needed to be removed. Why did blowing down the bot condensate to the blowdown system result in the sudden flow of propens to the flore? V-283A, had a leaking FTD that was sending a constant flow of progene to the flore? V-283A but he solvedown when the bot condensate came in content that the blowdown flored of the solvedown to not condensate and the solvedown to condensate and when the tot condensate came in content with the properse, the propane vaporized and went out to the flare.	The lumitable on the stratchwrapper at door 6 in the warehouse was lifted or knocked of of its base by a forbiff.	Green Card—Gap in concreis where 2 raised manway covers are located, RLOP, 19 Pt, Hallway between the plot first and Channel St. Can see liquid where apply located Liquidis of unknown depth, Need to barricade off the area to prevent access until it is fixed.	Green CardYellow Freight Lina Truck #115816 was seen running three stop signs.	Green Ceart, While filling out UPA for work to be performed on MOV-855, it was noticed that the switch specification disconnect had most of the Babaille tags that identify the equipment intesting mediting a seffect to determine with certainly which equipment was actually de-energized. As we waited the tenk field, we noticed that other boxes had their Bakatle Identification tags missing.	at oil on the bottom of by had put some new face. The mixture of nd a few other of my y	Green Card. Have Leen noticing with my treveils through the refinery that a lot of the fruck driver's that are entering the refinery are on call phone's and some are even smoking. Location: 31 Gate and Refinery area.	The reactor/regenerator DP set point was changed (not by an operator) from 5 psi to -1 psi, This caused a sudden drop in regenerator pressure, boss of DP psi to -1 psi, This caused a sudden drop in regenerator pressure, boss of DP coross S-70 aide verte, and unit tip on Triconex. Alarm log showed failures of treatmitishers: 60PDT70A (rating) DP) and 60PT070 (rgn pressure). Both instruments and termitillers were checked and no lesues found. The Olf (operator interface module) was found to be "suck." The Olf can change supports, so it is believed that the failure of the Olf could have caused this issue.	CONTROL OF THE ACT IN.
NL-Qualily - Product Qualily (int)	tnjury/iilness	Environmental	Environmenta)	NL- Equipment/Property Damego - General Liability	NL- Equipment/Property Damage • Equipment Damage	NL-Transportation - Confractor	ML-injurylitnass - Employee injury	NL-Injury/Iliness - Employee Injury	NL-Injuryfiliness - Contractor Injury	Operational Process/Procedures	2041
	(1) Debris was not visible because it was hidden in bottom channel of steel plank. Steek plank was not inspected fully before handling and/or passing to partner.	(1) SOS: Training & Procedures: Vacuum Truck Foamed Over. Line (catter) was sereited. Cutter was stricted back, Level in fruck was delig flest. Too much flow, Thory word using a 4" hose. Not changed to smaller diameter hose when cutter (fight meltical) broke intrugh, Personnel working the po were not aware of foaming phenomenon (encated of cotter). Pressure regulator was not used. Cutter was not listed on the MFG-3131.	(1) C-263A has a weaping safety that is sending a constant flow of propane to the rolled system. Relief piping all the way to the relief knock out drum is lead up. When het concensate was introduced to the blewcovem header, the propane reportace, (2) S-DS: Training & Procedures-FCC Flare Event. Visiter Concensate and process hydrocerbons blown down to relief header.		(1) it appears that something kicked these menhole covers off to one side, exposing the hote beneath.					(1) 2 Equipment Failure - issues Root Cause OlM failure. Further investigation and testing is progressing at CCC to simulate the event and or find any other way the sepoint can be changed by the OIM. Secondary Rootcause may be power surge when we lost the "plack Box". Further investigation and testing is progressing with the instrumentation group along with Horeigweii.	

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	12974	12936	12017	12917	12916	12916	12914	12914	12913	12913	12901	12901
	Richmond, CA - Refinery	Richmend, CA - Refinery	Richmond, CA - Refinery	Richmend, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmand, CA Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA • Refinery	Rickmond, CA - Refinory	Richmond, CA • Refinery
	4/28/2011 10:15:00 PM	4/28/2011 10:00:00 AM	4/20/2011 10:00:00 AM	4/20/2011 10:00:00 AM	4/20/2011 10:00:00 AM	4/20/2011 10:00:00 AM	4/12/2011 2:00:00 PM	4/12/2011 2:00:00 PM	4/2/2011 2:00:00 PM	4/2/2011 2:00:00 PM	4/21/2011 2:04:00 PM	4/21/2011 2:04:00 FM
	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
	Loss	Į.	Near	Near Loss	Coss Near	Near	Near	Near Loss	Near Loss	Near Loss	Near Loss	Near
	> 1 bbi spii (F-20 / F-C) into pipe franch bekween T-3104 / T-3105	Leak on the PUL filter Pot fore the sales toading racks	Green card - unsafe work practice	Green card • unsale work practice	Green card - use of incorrect tool to antisty do job	Green card - use of incorrect lool to safely do job	Green card - Higher than 4 feet up a ladder, no safety harness	Green card - Higher than 4 faet up a ladder, no safety harness	Green card - Doing radiation work in back of tank 3125 company did not let us know what was going on	Green card - Doing cadfallon work in back of lank 3126 company did not lef us know what was going on	Green CardChair nearly	Green Card—Chair nearly lips over
Crow was working to got NP-713 hot and on stand-by. AIP-713 was released from maint, after repairs were made on a cracked weld on the pump discharge spoci APS tool block. White working through the "P-713X commistion/stant Pumps procedure in procedure in the NH-NP-4731 PIGO flow to DCC was tost. Pelloving procedure area speciator got to step 3.10 "Using hand jack elowly open, P-713X suction block 2-3 turns: "When the operator dot this gipt seat flush from the pump got into the suction line and the on line pump left suction and seat operator of the loss of thow and area operator closed the suction block (Procedure step 3.11") and the online pump regained suction and flow was restabilished to FCC. In the	All approximately 2215Hours there was a splif in the pipe tranch between T- 3104 and T-3105 where the commercion for the water froughout by the 3 stage continues invente the the Petrolite. At the time FSC was choulding utilities through T-3104 with the Robo jet in service. The 3 stage conditings was unrining and they were setempting to pump some water hio the ST Featolis from the cantinues add vite a Velation pump set tup. The PSC treatment said that he was seeing back pressure on the Velation pump and could not get out. The Crude HO traced out the system to £6 PS and confirmed that everything was open and she attended the dean water pump to verify spen to the look box. PSC again tried using the Velation pump to transfer H2O to the 6 Periodite functional pump and could be dear yet the system. The splif occurred when the car PSC engolary dear the first observations. The splif occurred when the car PSC unpolayed decompleted the line is the stein point without first doaling the gate value Once the line was disconnected, it sprayed out less than a barrel of H2O / HC into the Inench.	Blown gaskat on the PUL filer pot near the Truck Loading Rack fince which leaked less than a half barrel to a contained basin.	Green card - During a riobin to cougar sack transfer (at ESA) I neliced that the technicien had to get under the flobin to open the valve while it was raised in the ex.	Green card . During a flobin to cougar sack transfer (at ESA) I noliced that the lectinities had to get under the flobin to open the valve while it was reised in the air.	Green card - during a flobin to oxyger sack trensfer (et ESA) i noticed the lochrideans were velhig the wormig facil for the job. a funner that was not big enough which caused the calaiyst dust to go everywhere.	Green card - during a flobin to cougar sack itansfer (et ESA) i noticed the lechnicians were using the worong foot for the jobs a flument that was not big enough which caused the catalyst dust to go everywhere.	Green card - Higher than 4 feet up a ladder, no safely herness	Green card - Highar than 4 fest up a ladder, no safely hameas	Green card - Doing rediellon work in back of tank 3126 company did not tet us know what was going on	Green card · Doing rediellon work in back of tank 3126 company did not let us know what was going on	Croen Cord-Chrwon Employee started to oit down in a 4-railer whoeled chair with a list back function and was violently furcined back in the chair almost lipping own co his back. Some of the 4-roller whenced trailer were storen and of service a true year eagle to the afficient reason. The 5-roller whenced chairs on band have to my knowledge have not caused any problems. Be more dilippent in screening out the chairs in question. Make knowledge of incident to other searches.	lipping overon his back. Some of the 4-roller wheeled chairs were sizen out of service a tirey east ago for a different reason. The 6-roller wheeled chairs on hand have to my knowledge have not caused any problems. Be more diligent in scenaring out the chairs in question, Make knowledge of incident to other personnel.
	Erráronnenial	Environmental	NL-Injury/Illness - Contractor Injury	NL-Injury/iliness - Employee Injury	NL-Injury/illness - Contractor Injury	NL-injuryillness - Employee injury	NL-injury/iliness - Contractor injury	NL-Injury/Illiness - Employee Injury	NL-Injury/liness - Contractor Injury	NL-injury/ifiness - Employee injury	NL-Injury/iliness - Employee Injury	NL-Injury/Ilineas - Contractor (njury
(1) Suzilon valve of MP-713 was opened to far thus allowing	(1) Contractor failed to close block valve before disconnecting line. Why? Because confractor was not following procedures. Why? Because conferedor was in a hurry	(1) fine has no releif, when T-1035 the lank this line releaved flows taken out service, the system PRD's do not have a route to relieve for sun pressure. (2) Not compliance on establish procedure										

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	13267	13267	13249	13247	13247	13245	13180	13178	13178	12987
Richmond, 2/5/2011	Richmond, CA -	Richmond, CA -	Richmond, CA - Refinery	Richmand, CA Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery
2/5/2011	53/2011 3:30:00	5/3/2011 3:30:00 PM	5/3/2011 12:00:00 PM	5/2/2011 8:00:00 AM	5/2/2011 8:00:00 AM	5/2/2011 6:17:00 AM	5/2/2011 12:00:00 AM	5/2/2011 8:15:00 AM	5/2/2011 8:15:00 AM	4/29/2011 1:00:00 AM
	O	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
	Loss		Loss	Naar	Near	Loss	Near Loss	L059	Loss	Near Loss
Late S/U notification of RLOP LNC unit (fax trenamission falled on Feb. 5, and was not discovered	A-Trein tripped due to High Furnace box pressure.	A-Trein iripped due to High Furnace box pressure.	Employee was tearing forward and right side of neck made contact with hot steam tracing which caused a minor burn.	Green Card, Tripping hazard, Location: Between 4 Crude and DHT.	Green Card, Tripping hazard, Location; Between 4 Crude and DHT.	Gale 31	Concrete Dust blew in eye	4Rhen K-3550 shutdown and caused the furnaces to trip	4Rhen K-3550 shutdown and caused the furnaces to trip	
	On May 3rd in the morning adjustments were made to A (rain hydrig to maximize steam output. Then the decision was made to return back to normal. Accound 3 hours late, things were back to normal end a move needed to be made on the Fc-318. The Operator in training on the work station saw that; was in "BAAS" (a cascode mode) and placed it back to manual and wark to change the out put from 72% open to 73% open and enbarred 73 instead of 73 when FC-318 closed of for 7.3% the funnace got a high where box pressure alarm and then the furnace went to min file (per procedure) and automatically opens the guideline (ciral fen by peas). This caused the draft fan "X-305" to shut down on high arms. A breaker reset was done on K305, PC318 was opened to 75% in manual, closed the guideline (ciral fen by-peas) and start recovering from min. The We start or typped the PCC share inclusions and start recovering from min. The. We also typped the PCC that be clasticar when A Tain went to min fines due to over pressured of the Fuel Gas KCO (V-2)41 but The Committee of the Fuel Cause staticary of the Fuel Gas KCO (V-2)41 but The Committee of the Fuel Gas KCO (V-2)41 but The Commi	On May 3rd in the morning adjustments were made to A Irain tyring to maximize steam output. Then the decision was made to return back to normal. Around 3 hours later, things were back to normal and a move aneeded to be made on the PC-318. The Operator in training on the work stalkin saw that it was in "8CAS" (a ceccede mede) and placed it back to manual and work to change the out put from 72% open to 73% open and entered 73 instead of 73. When PC-318 to essed off to 73% the fundace got a high mance box pressure starm and then the furnace want to min fire (ser procedure) and automatically opens the guideline (draft fan PC-305" to shull down on high arous. A breaker reset was done on K305, PC318 was opened to 75% in manual, closed the guideline (draft fan PC-305" to shull down on high arous. A breaker reset was done on K305, PC318 was opened to 75% in manual, closed the guideline (draft fan PC-305" to stall down on high arous. A thet time we were side to re-fire all burners on the furnace and start recovering from min fire. We start highped the PCC fare it delater when A-Tain went to min fires due to over pressuroing of the Fuel Gas KO (V-344) for F-395, 355 and F-340. Please see investigation root causes and	Employee was assisting insulators wrap steam tracing on P-1601 in the RLOP unit. While working with insulators, employee made contact with a piece of hot 1/2 as steam tracing. Contact caused a minor burn to right side of neck.	Green Card. While walking Ihrough the tol between 4 Crude and DHT, I noticed a Init of debris, pipe fillings, melal, garbage which could pose a Intping hazard or a driving hazard.	Green Card. While waiting through the fot between 4 Crude and DHT, i notized a list of debrist, pipe filtings, metal, garbage which could pose a tripping hazard or a driving hazard.	At the above time, date and location the Chemical Transfer valide (send) stopped at Gate 3) to turn in their "paix card" (temporary outry permit) to the Officer at the Gate and depart the refinery, immediately after the Officer took the "pirk card" the driver drove his valide into the gate, breaking the gate are off. The driver do not war for the Officer is marually open the gate. Since the driver had just made a delivery to the refinery and was possibly not swerre of the necessity to wait for the Officer to manually press the botton to raise the gate for him to sait, he drove into the gate, breaking off the barrier arm. There was no damage to the Contractor vehicle and the gate was immediately repaired and put back into service.	Contractor concrete dust blow in his eye.	Lass of 4fhon K-3560 caused loss of hydrogen to North Yord (TKN feed cut, pulled MCD from TKC, cut HZ bleeds) and sont DHT product offices, NHT feed cut.	Loss of 4Phen K.3550 caused loss of hydrogen to North Yard (TKN feed cut, pulled MCO from TKC, cut H2 bleeds) and sent DHT product officet, NHT feed cut.	
	Erwitonmental	Operational Process/Procedures	injury/ilinese	NL-injury/iliness - Contractor injury	HL-in∤ury/illness - Emptoyee in∤ury	Equipment/Froperty Damage	NL-injury/liness - Contractor injury	Quality	NL-Quality - Product Quality (Int)	NL-Operational Process/Procedures Plant Run Out/Slow Down
(1) not checking fax completion document for successful	(1) The wrong output was entered by an "in Training " Operator. The Operator had been "Piggy Backing" on OWS-2 Operator. The Operator had been "Piggy Backing" on OWS-2 for just a short time, getting to learn in depth process control and learning should various key process valeties. Learning how to take confired of loops and make moves in response to changes in the process as a well as alearn exponde moves. This being done under weach of a qualified control board Operator. (2) Totalizarting on the FCC flare was caused by and having a conlingency plantynosedure in place for running with the ByPess open on PC-S16. Procedure should capture what to do if any of F-305.F-335 or F-340 FSCs itp. what to do if any of F-305.F-335 or F-340 FSCs itp.	(1) The wrong output was entered by an "in Training " Operator. The Operator had been "Piggy Backing" on OWS-2 for just a short time, getting to learn in depth process control and learing shout various key process valetiles. Learing how to take control of loops and make moves in responde noves. This being done under watch of a qualified control board Operator, (2) Teletizer tips on the FCC flear was coursed by not having a contingency plantprocedure in pleas for numing with the ByPass open on PC-314. Procedure should capture what to do if any of F-305 in F-356 in FSCs inp.	(1) Unaware of surrounding environment			(1) Cantractor vehicle proceeded attempt to exit refinery at Galle 31 betting Security Officer could manually push button to fit gales, Gate had to be lifed manually because Driver was making a first time delivery and did not have a Smart Badge. Driver was equived to refun "pink Card" (Emprovary Permit) to gate Officer and was not aware that he had to wait for gate to be raised manually. Also, probably did not see gate from his high position in the semi.				light seal flush slock to enter suction line and ultimately gassing up the on line pump. (2) Procedure is box vague needs to be more precise on how far to open suction valve when warming up pump.

	13409	13390	13349	13344	13342	19397	13397	13321	13276
	Richmond CA Retinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Rafinary	Richmond, CA - Rafinery	Richmond, CA.	Richmord, CA -	Richmond, CA • Refinory	13276 Refinery
	5/2/2011 7:00:00 AM	\$/4/2011 7:12:00 PM		5/3/2011 4:40:00 PM	<u> </u>	\$~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	4/29/2011 12/30:00	, 5/4/2011 12:00:00 AM	A
	Closed	Clased	Closed	Closed	Closed	C C C C C C C C C C C C C C C C C C C	Ciosed	Ciosed	Closed
	Loss	Near Loss	Loss	Near Loss	Near Loss	Loss	LO 158	Loss	Loss
Green Card - while kooking to hook up air hose to yard air connection in plant, mechanic noticed the hittings on steam three and	EE Scrathed Haad	Green Card - Inconfirmed odor complaint	K-1100B tigh vibration shutdown	Grean Card - Invalid Ignition Source Permit at Smioking Post	Green Card - Lit cigarette built found on floor of smoking post	Feed Rate Limits and CO	Feed Rate Limits and CO	Trailer towing longue dennage during unauthorized move	issued on 5-2-11
	EE was distring pol & pan rack and bumped her head on a plastic lub lid. Strathed her forevieed.	Oreen Card - An unconfirmed complaint was called in from a Ft. Rictmond resident to the City of Richmond's 911 Dispatcher on Wednesday evening. 5/4/11.	K-1100B stut down on high vibration and wouldn't restiert after pumping out it and levels. Operation rolloed K-1100B 1st stage distance piece was significantly damaged.	Green Card - The ignition source permit for the smoking post at 218 Main was out of date & no longer valid for the smoking post.	Green Card - Passer by found a III digarelle butt on the wooden floor of the smoking post at 216 Mein Street.	After stering up following FCC shudown on 4/25 wanted to max rases at FCC. Regen temps throwen bearing so high that he had believe could not be controlled and spreys were turned on for too long, resulting in a CO successfuria and an environmental econdeble sevent. Feed rates were reduced to regain control but temperatures still remained high and feed could not be uncessed. FCD worked with AGU and Ops to undestation what is districted about current situation. CO excessed ance were exaused from refunders and existing the amount of other than environment affecting place in the regenerator and the amount of other than exast being mach. Afterburn and oxiding interessed because certainy as activity was very high after startup and high NCRT it avest in the feed owner lest six months due to higher MCRT coming from TKC and imports to FCC. MCRT wasn't higher than it had ever been belove, but after startup a lot of fresh real analysis was added and increased the overall activity. Castleysi was lost during the upplanmed shudown and was rard made up with Feat within the plant was down and at low pressure to get the Ecot in CRT was perfect and be found on share down and as a long and increased because of the power of the startup and increased the sound at low prossure to get the Ecot in CRT was perfect and the CRT CRT MTS-MREE, RICOM1. CHEVRONITEXA.OD. NETISHAREMENT SHARES, AND ALL STARES AND	After starting up following FCC shuddown on 4/25 wented to mar rates at FCC. Regen lengts lowever became so high that heat balance could not be comitted and sprays wore turned on for too long, resulting in a CO accordance and an environmental recordable sevent. Feed rates were reduced to regain control but temperatures still remained high and feed could not be increased. PED worked with ABD and Ope to understand what is different about current studies. CO exceedence was equal and feed could not be the smount of attentum taking place in the regeneration what is defined the smount of croke that was being medic. Afterburn and coking increased because catelysis activity was very high after standup and high NiCRT is levels in treased or our less six months due to higher MCRT coming from TKC and simports to FCC. MCRT wasn't higher them it had ever been before, but after studies a lot of feet eathlyst was a dead and increased the overall activity, catalyst was lot of under activity as down and a collection of the common strength of the common strength of the common strength of the common strength of the CRT wasn't higher them it had ever been before, but after studies a lot of feet activity as down and a collection of the common strength of the common	During ar unauthorized move at an unknown time and circumstances by unknown personnal, a trailer belonging to ETC Houston and ournerfly being stored at Richmond was claraged on the list support towing trains member. The frame member was severely bent and a note was punched tike it possibly due to jeckething during the move. It should be noted that since the move was made at an unknown datafrine, no definitive description of weather conditions, lembrature, or time of day can be given; those shown are from the date of discovery.	was not discovered until Feb. 8) NOV was issued on 5-2-11
	Ssaujiji,karjuj	NL-Environmental - Release	Equipment/Property Damage	NL-Business Process - Business Process	NL-Fire/Explosion	Operational Process y Procedures	Environmental	Transportation	Environmental
	(1) Employee scratched head because she didn't see itd sticking out.		(1) Demister pad allowing liquid to enter compressor.	9		(1) CO exceedance caused by excessive afferburn that was not responding to normal spenuto ections. Operator did not know about high Cat activity. (2) Feed rate limited through combination of increased enount of respectately acted dates shriddyne. (3) Feed rate limited through increased emounts of the country and control of the country and c	(1) CO exceedance caused by excessive afterburn that was not responding to normal operator actions. Operator cid not know about high Cast activity., (2) Feed rate limited through combinellion of increased amount of flesh schalyst actived sittle chuldown, (3) Feed rate limited through increased amount of ALCET causing high levels of coke.	(1) Unaulbodzed move of trailer	Pan

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	13671	13667	13666	13864 13864	13661	13604	13664	13564	13501	13424
	Richmond, CA - Refnery	Richmond, CA - Refnery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmend, CA - Refinery	Richmond, CA - Refinery	Richmond, CA · Refinery	Richmond, CA - Retinery	Richmond, CA CA Refnery	Richmond, CA - Refinery
	5/10/2011 12:00:00 PM	5/10/2011 12:00:00 AM	5/10/2011 B:00:00 AM	5/10/2011 8:00:00 AM	5/10/2011 12:00:00 PM	5/9/2011 1:00:00 PM	6/9/2011 1:00:00 PM	4/25/2011 12:00:00 AM	5/0/2011 4:05:00 PM	4/5/2011 8:30:00 AM
THE PARTY NAMED AND DESCRIPTION OF THE PARTY NAMED	Closed	Crossed	Closed	Closed	Ciosed	Ciosed	Closed	Closed	Closed	Clased
	Loss	Loss Near	Near	C SS O		Loss	Loss	Near	Loss	Loss.
	Operator injured back removing sling from underneath cargo hose.	Green Card, Pigeons are causing an inconvenience and health hezard. Location: Machine Shop	Green Card, Traffic milmor at 8 Pump Station on Quarry Rd is missing. r Location: Quarry Tank s Field	Green Card. Risk of bumping air valve hanc's inadvertently. Location: Alky V-1441	Employee was working on a breakfer and the arc shoe hardle was extended Employee turned to Felireve a tool and the hardle shuck him showe the right eyebrow causing a small cul.	EE fet discomfort in lower back and left leg. White welding in the overhead position, which requires nodding his erms above his had for extended period of time.	EE felt discomfort in lower back and left leg. While welfing in the overhead position, which requires holding his arme above his head for extended period of time.	OSI past scope freeze revealed remaining life issues requiring replacement during tuniaround	Mechanic got a partical in his loft eye.	fire line. Mechanic elmost mistook them as steam line for air line.
	After disconnating from the vessel the hase was placed on the ground via crains and sing. White trying to remove the airing from undernealth the hose the operator fell pain in his lower back.		Green Card. Spokingstraffic minor at the corner of 8 Pump Station on Quarry Rd is missing. Vehicles traveling the road there are now blind to on-coming traffic. Location: Cutarry Tank Ridd	Green Card. Unlocking hand ball valve used in plant. Risk of bumping ali velve trandle inadvertantly shutting air crit to velve. Location: Alky V-1441 Level Control 14LC737	Employee was working in the CRC sub on the 12.340 breaker which is in a cramped work eres. He taid the arc shoe handle extended white working at ground leval. Safety glasses were on when the employee turned to retrieve a toot, the handle struck Him above the right eyestow causing a small cut. The employee want to the dish have the injury seen by the modical staff. A bendage was applied and the employee returned to work.	While welding in the overhead position for extended period of time EE fet discomfort in lower back and leg.	While welding in the overhead position for extended period of time EE felt discomfort in lower back and leg.	OSI reported TML 10 on 0651-201-003 to have <1 year remaining life, Impact sent out a scope stakeholder letter to all inputers 1/27/2010, Input freeze was indied to be May 27, 2010. This work requires a furnationed to complete and will be going that the exits work process.	Mechanic received particles in it is left eye white uting a hand ginder, Mechanic was wearing all his required safety equipment. After being check out by Chevron EMTS mechanic was transported to the chevron clinic to make it sure perfices had been removed. After being check out by the chevron clinic was clear that the mechanic still had particles in his left eye. The chevron clinic vanit mechanic to an outside clinic to have remaining particles removed from his left eye. Mechanic will have a follow up appointment on 5/7/2011 and will return to work on Monday.	
	trjuryliiness	NL-Lessons Learned	NL-Lessons Learned	NL-Lessons Learned	trjwry/illness	injury/iiness	Nt-injury/liness - Employee injury	MBusiness Process - Business Interruption	injury/liness	NL-Lessons Learned
(1) At times, all the fans are on, but quite often at least one or more lans are of. The HOX variable MBO31 shows the number of fans or of a ray fan, Rocettly when V-1100 temperature approached 150F, here were as few as 6 of 12 fans or Lack of understanding Jeanshinkly to affect a changing temp to fixed levels in the system, (2) At times, all the fans are on, but quite offen at least one or more fans are of. The HDX variable H1031 shows the number of fans on at any time. Recently when V-1100 temperature approached 150F, there were as few as 6 of 12 fans on. Only soft learns are on, but quite offen at least one or more fans are of. The HDX variable MBO31 shows the number of fans or at any time. Recently when V-100 temperature approached 150F, three were as few as 6 of 12 fans on. —There is nothing in the CDD Table for temperatures on T1054, (4) P-1171 does not work	(1) Lifting heavy cargo hose. Operator says he used proper ergonomics back straight, lifting with his legs.	(1) Broken windows in various areas of the shop., (2) Shop is not adequately closed up after the end of the shill which provides eathy points for birds to enter the various areas., (3) Pigeons are searching and nesting in the shop.			 Employee lost his situational awareness while working on the brooker. 	(1) EE in stationary position numerous times for long periods of time the last several weeks while porforming welding training.	(1) EE in stationary position numerous times for long periods of lung the last several weeks while performing welding training.	-	(1) EE used recommended PPE however during the task the grinding wheel was able to kick up metal particles under the face stried and safety plasses because it was spirning toward the user instead of away from the user.	

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	13982	13908	13894	13864	13834	13827	12827	13806	136B4
	Richmond, CA - Refinery	Richmond, CA - Rafinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richtmand, CA . 13834 Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - 13806 Refinery	Richmond CA Relinery
	5/10/2011 9:00:00 AM	5/14/2011 2:21:30 PM	5/12/2011 3:00:00 PM	5/4/2011 9:30:00 AM	5/5/2011 8:30:30 AM	4/7/2011 7:00:00 AM	4/7/2011 7:00:00 AM	5/9/2011 12:00:00 AM	5/10/2011 1:30:00 PM
	Closed	Clesed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
	Near Loss	Loss	Loss	Near	Near	Near	Near	Loss Loss	Na ar
Green Card. Problem with	Green Card. Stepm leak in pipeway adjacent to pole 11010. Location: Channel St and Petrotte	While testing routine elerm wrong test switch was engaged	Employee injury to his foot	New P1001 Feed Pumps put in service before all unsafe conditions were addiested	Green Card, Motor for K- 910 was racked cut	Green Card - repair of guard rail needed on bridge #125 on Charmel @ Xylane	Green Card - repair of guard reil needed on bridge #125 on Charmel @ Xylene	MABT MX-50 MOR Failurs	K-1100A shutdown on high
Green Card. The amount of pigeon droppings ere incresing by the day. Droppings expear on work banches, wells, paperwork, machinery, personal tool baxes in the change norm, and vanius areas of the aborp foor. The droppings on the floor are waited on regularly throughout the day luming them into piles of fine dust. This focal dust becomes alroome and impers in the air	Green Card. Sleam leak in pipaway adjacent to pale 11010. Have questioned and relified Utility ops. regarding safety in proximity with no safety feedback.		An employee called me at ~12.45 pm to report that the heel on his foot had swellen up after shipboard fire training at Teasure Island. The training took place the day before the employee reported the incident. He stated that he thought he swelling may have been caused by his fire boats because it had happened before where using his same boots. I was with employee in training and he did not report it to me during or after the training.	The rush is start the new P-1601 pumps before all safety concerns were met peach an engoing safety hozard to the operators operating the pumps. The design did not itake in account the safety in design (SID) recommendations to protoct operators from unsafe conditions. The pump discribings valve locations and handwheels are above mark height for the locque required to open and clease the valves. The food filter switchings valve is positioned in such a way that the operations must crouch down under piping and search tearing and swifting the protection of the flow from one filter to the other. Operators LPSA, Refinery Tenets and Stop Work Authority went unheaded to prevent a delay in the startup of the pumps.	Green Card. Molor for K-910 was racked out but area operator was not extere It had been done entirer that morning. Whiten procedure for rack out on cabicle door was incomprete, Appears JJSV was not done because operator was not aware work was going on.	Green card - on the southwest slide of the bridge there is part of the guard rail missing as well as the 6' x 8' timber at the base.	Green card - on the southwest stide of the bridge there is part of the guard rail missing as well as the θ^* x θ^* (imber at the base,	On a routine round by operations it was noticed that the accisation controller was not of range. They informed the electrical group to get it aviewed. It was found that the MOR on Mc-Gotaled. The MORI is necessary for teeping our excition within the desired range (55 legging to 55 leading). The is done for 2 measons, 1 is efficiency and the other is to keep the machine in sync with the grid. These have been other failures on the MOR and it's controller in teh last 8 morbits.	X-1 IOA. shuldown on high liquid level on V-1 170 on subsequent attempts to start up we had the compressor bit on the handle wellow to the southout start up we had the compressor by the first of the shuldown showed the compressor to be running well, this was on site outing start up attempts and a knock due to liquid could be heard in the 3rd stage.
	NL-Lessons Learned	Process Safety Management (PSM)	injury/liness	NL:Injury/liness - Employee injury	NL-Lessons Learned	NL-injurydikness - Employae Injury	NL-injury/liness - Contractor injury	NL. Equipment/Property Damage - Equipmont Damage	NL. Damage General Esploment/Property Liability
		(1) Continuity broke once HO moved from observer to hands on. PCO was following process and ask HO to throw the switch.	(1) Employes was contacted and seen by our clinic. Employee constition net classified as an on the job frighy but a medical constition. Employee is doing follow up at his own doctor., (2) Non occupational injury.		(1) Motor lesting was being performed on K-910 without LOTO per RI-1980, but was deemed heafficient from 2nd group of electricians emixing on eite to LOTO same place of equipment. Why. Scope change to engoing work with 1st group of electricians, but they don't modify LOTO. Why - 1st Group of electricians don't think the change of work scope would require full LOTO.			(1) Equipment failure	Cus to carillation when pumping tight field. Designed for 15 gpm — Higher level takes up valuable vapor space used to kep from ontraining tiques in this gas to the compressor. Of kep from ontraining tiques in this gas to the compressor. Of Demister ped on V-1170 not working well - Design not causing enough level to drop liquids out in V-1170. Hote in piate was too large preventing financies in vendoity. (6) Check valve downstream of the discharge stream to C-1190 tesking by allowing flow to go back into compressor. It is not 2nd stage but low in the light of the compressor. It is not 2nd stage but low in the light of the compressor when both marbhase were down of anticipate that leaking past this check velve would cause input freight to the leaking past this check velve would cause liquid return to compressor when both marbhase were down. (7) K-1100A suction bottles have high level light but K-1100B dose nat. Lack of understanding to need to have for the past timely the past through a such that the compressor when the compressor is available at all times original design (in the past timely have been more important to have the compressors abelie to run vs. machine demage)

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	14189	14184	14178	14178	14178	14171	14155	14085	14085	14047	14047	13983
	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA Rolinary	Richmond, CA - Refinery	Richmend, CA - Refinary	Richmond, CA - Refinery	<u> </u>	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Rafinery
	5/18/2011 12:00:00 PM	5/18/2011 11:00:00 AM	5/12/2011 5/45:00 AM	5/12/2011 5:45:00 AM	5/12/2011 5:45:00 AM	5/16/2011 8:00:00	5/17/2011 10:00:00 AM	5/12/2011 12:00:00 AM	5/12/2011 12:00:00 AM	6/15/2011 8:00:00 AM	5/15/2011 8.00:00 AM	Richmond, 5/15/2011 CA - 8.00:00 Rafinery AM
	Closed	Closed	Closed	Closed	Closed	Ciosed	Closed	Closed	Closed	Closed	Closed	Closed
	Coss Coss	Near	Near	Neer Loss	Near	[038	Loss	Loss	Loss	Negr Coss	Near Loss	Loss Loss
	EE felt dizzy and the EMT's were called to evaluateEE soon at clinic and released.	Green Card - Contractors working without proper safegaurds	Green Card, Treffic doos not follow the posted speed limit, Location: Center St. by Bidg 216	Green Card. Traffic does not follow the posted speed limit, Localion: Center St. by Bidg 216	Green Card. Traffic does not follow the posted speed limit. Location: Centler St. by Bidg 216		April List C Report reflected a net loss of 115 BBLS	Cogen HRSG Buiking Permit #10-04084 Non conformance	Cogen HRSG Buiding Permit #10-04984 Non conformance	Green Card. Pigeon droppings all over the Mackine Shop floors and equipment.	Green Card, Pigeon droppings all over the Machine Shop floors and equipment.	extensive amount of pigeon droppings. Location: Machine Shop
Near end of day shift at 15:00, Cygnus Voyager completed discharge of Arab Lt Chude of Into T-3105. The Afea Operator closed motor operated valve	CVX Employee felt dizzy and the EMT's were called to evaluate. The Employee was taken to the clinic for further evaluation and subsequrally released.	Green Card - Two contractors working on the awring of the Main Gate guard sheek were obstincting the need without proper waring signs, comes, barriers, or flag person. One contractor up on the step tadder that was in the roadway was exposed to a fail hazard if the ladder was bumped or capped by passing volkeles.	Green Card. The traffic does not follow the posted speed limit. Location: Tech Center area on Center St by Bidg 216	Green Card. The Iraffic does not follow the posted speed limit. Location: Tech Center area on Center St by Bldg 216	Green Card. The traffic does not follow the posted speed limit. Location: Tech Center area on Center St by Bidg 215	Brown Eurns Distributing was short product on the three separate orders listed below in March. During this time R.I.P was receiving an abrommal should not inhounted due to low inventory levels. R.I.P was unloading intermed and unitying to load funds of the low inventory levels. R.I.P was unloading hitbounds and bying to load funds to meet customer demand. Product entiring on inbounds was and six products and the product was not detired to their other clocation. Merketer is still eating for a credit to in issued. Description: The marketer ordered and was billed for 4 drums of Delo (Grease 2 (23200868)) but received are chans. D. Oder 213462. Probid submitted on 3/8/11 and is still open, Description: Marketer ordered and was billed for 8 pais of Meropa 220 (277211785). The marketer ordered and was billed for 8 pais of Meropa 220 (277211785). The marketer ordered and satisfied on the product. Please is sue a credit for 2 pais of Meropa 220. Corder 182663. Sales decided to issue a sales policy adjustment credit to resolve this issue because the marketer did not receive the drums and expected a credit to be issued.	During the Month of April RLP WHS adjusted out 115 BBLS.	Rework to support non conformance on Capital Project	Rework to support non conformance on Capital Project	Green Card. There is given droppings all over the Machine Stop Roots and equipment. A green and was put in before (#13883) and the supervisor's only corrective action was for everyone to wear dust masks which do not protect you from the fire particles of the pigeon droppings. A special respirator would read to be work.	Green Card. There is pigeon deeppings ell over the Mechine Shap floors and equipment. A green card was put in bifore (#1368) and this supervisor's only corrective action was for everyone to wear dust masks which do not protect you from the firm particles of the pigeon droppings. A special respiration would need to be your.	
	NL-injuryilliness - Employse injury	NL-injury/lliness - Contractor Injury	NL-Transportation - Company	NL-Transportation - Contractor	NL-Transportation - Personal Use	Business Process	Operational Process/Procedures	Quality	Business Process	NL-Injury/limess - Contractor injury	NL-injury/limess - Employee injury	NL-Lessons Learned
						(1) Cusiomer short product why? load wasni checked before loading why? operator didnt check load manifast why? Operator assumed all products were accounted for. Root cause; Operator choose not to follow General shipping process	(1) Loss of BBLS in the month of April Why? 01 Adjusted BBLs out of Inventory Way? Book to physical Inventory was off Why? Product wasnit Rabranded to Leaker mix Root cause : Operator chose not Rebrand product to Leaver mix	(1) Did not understand all the Special Inspection requirements owing construction, either the total # of St or type (Ls., fit up & final vs. final only on structural weeds) and no dear tracking meltined. (2) Decision was made to continue construction without meeting special inspection requirements (work it out later).	(1) Did not understand all the Special Inspection requirements during construction, either the total # of \$10 or type (Le., \$1 up & final vs. final only on structural welds) and no dear tracking method. (2) Oecision was made to continue construction without meeting special inspection requirements (work & out lister).			

		A Quality Centrol Operator on A Crow was sent to the clinic after complaining of pain in strouber. She was transferring milk crails baskets full of bottles of	A Quality Control Operator on A Crew was sent to the					
	NL-Lessons Learned	Green Card Put Green Cerd Stellon on First Floor of Admin Bidg.	Green Card, Put Green Card Station on First Floor of Admin Blog.	Near	Closed	5/18/2011 8:00:00 AM	Refinery Refinery	14627
	NL·Lessons Learned	Green Card Floor Monitor List needs to be updied in Admin Bidg.	Green Card, Floor Monitor List needs to be updated, Location: Admin Bidg	COSS COSS COSS COSS COSS COSS COSS COSS	Closed	5/18/2011 B:00:00 AM		14526
	NL-Environmental - Refease	Green Ceid - During T-3104 Immaround washiles, odors described as plungent were reported by CFC while passing through area. Area had a vac truck & centrifuge nunring white tenk was opened for deeming	Graen Card - Odor Issue	Near	Closed	5/23/2011 1:30:00 PM		14519
(1) SOS: Training & Procedures: Spili to soil from removed piping, Residual liquid in out pipe. Prep. Work did not eddress fow points in tires, animals, iata, water, etc.	NL-Environmental - P	After transporting various sections of pipe which was removed from RDC and teken to Reclaration a small emount of product leaked onto the ground where the pipe was stiling. The pipe had been cleaned, drained, swifted for LEL's and tagged prior to transportation. Dispuss were placed into the ends of the pipe as a procession, when Pain Pendiction arrived at the scene, they writted the seen and tested for branches. Test results indicated approximately 0.5 PPM bonzene from about 5° away from the leak. Later tests showed no potential for exposure at the source.	A small emount of product leaked out of some pipe that had been transported from RDC to Reclamation.	Near Loss	Closed	5/23/2011 3:00:00 PM		14465
	NL-Quality - Addilive Injection (Int)	Additive injection system SD due to incorrect LPO set up for control system. Export was stated with the additive tank working in the lower 25% when the lank hit 18% the control system shutdown the additive pump. LPO was reset to 12% which had previously been determined to be the safe LPO and the cargo lift was re-elected.	Additive injection S/D during cargo export delaying transfer	Near	Closed	5/23/2011 1:00:00 PM	Richmond, CA - Refinery	14450
1) Pump seals failed because of lack of PM's	oranenia! -	Led code for the motoring pump on the viscosity bath, causing about 10 gallons of ot to spill on the floor of the analyzer sheller.	OR spill in HNF Analyzor Sheller	Near Loss	Closed	5/22/2011 10:00:00 AM	Richmond, CA - Refinery	14445
(1) Driver was to close to the exit gate post. Did not appear to pull far enough away from the gate when he moved the vehicle, that sessifing in the vehicle minor plently broken and the peasonger door being accatched and dented through slight contact with the gate post.	t tu Equipment/>roporty U Demage	PPS Security Officer made contact with the gate pole on exit side of 31 gate parking los, demaying passenger side mirror, scratching park and slightly deriking passenger door on contractor vehicle white driving out of the 31 gate parking lot. There were no injuries and no demarge to CVX Porporty.	PPS Security Officer struck gate pole on ext side of 31 gate parking lot, damaging passenger side mirror and scratching paint on contractor verificie. No damage to CVX Property.	693	Clased	5/19/2011 9:10:00 PM	Richmond, CA - Refinery	14347
(1) Driver was to close to the exit gate post. Did not appear to pull far enough away from the gate when he moved the validate flus resulting in the vehicle mirror being broken and the passenger down being scratched and denfed through slight contact with the gate post.	NL-Transportation - U	PPS Security Officer made contact with the gate pole on exit side of 31 gate parking bot, dramaging passenger side mirror, straticking paint and slightly denting passenger door on contractor vehicle while officing out of the 31 gate parking bot. There were no Injuries and no demage to CVX Property.	PPS Security Officer struck gate pole on soit side of 31 gate parising lot, damaging gassinger side mirror and scretching paint on contractor vehicle. No damage to CVX Property.	Loss	Closad	8/19/2011 8:10:00 PM	Richmond, CA - Refinery	14347
(1) Driver was to close to the exit gate post. Did not appear to put it are enough every from the gate when he moved the vehicle, thus resulting in the vehicle ordinary being brown and the passenger door being scretched and denied through slight contact with the gate post.	Transportation	PPS Security Officer made contact with the gate pole on exit side of 21 gate poxing glot durnsping peasenger side mirror, secretaking peint and slightly useful parssenger door on contractor vehicle white driving out of the 31 gate parking joil. There were no inflictes and no demage to GVX Proposity.	PPS Security Officer struck gate pole on exit side of 31 gate parking lot, damaging passenger side miror and scratching paint on contractor vehicle. No damage to CVX Property.	5	Closed	5/19/2011 9:10:00 PM	Richmond, CA - 14347 Reinnery	14347
(i) The employee was in a hurry and didn't take the time to review their position ratelyte to potential obstacles. Why were they in a hurry - they didn't see the whicle where they expected it to be so they were searching for it is numbing late for his meeting, they were searching for it is numbing late for his meeting, they were they numbing late - because they had direct to complete one final task before leaving for their meeting.	injury/liness	While between two cars and luming, an employee's elbow came into forceful contact with the 5de milror of an adjacent vehicle.	Employee hil elbow on cer side mirror	Loss	Closed	5/19/2011 12:55:00 PM	Richmond, CA - Relinery	14270
	NL-Lessons Learned	Green Card. Near miss at other non-Chevron facility prompted question about chain valives. Thanks to whoever turned in this Green Card - It's a good question to raise (ABAE).	Green Card Near miss at non-Chevron facility prompted question about chain valves.	Loss Near	Clossd	5/16/2011 8:00:00 AM	Richmond, CA - Refinery	14239
(1) Motor valve did not close all the way during line switch to accommodate a ship discharge, (2) Day shift Board Openfor got two separate additing alarms of unexpecied movement on 17-3 tios. He achieve/sogod the alarms, reviewed the tark satist on computer thinking the alarm was false, but did not notify Area Departior.	NiQuality - Product Mis-Daliwary	(MOV) on fill fine at T-3 105 and no openned if on same fit time at T-3 100 to begin detraining of XXI. cude cit is T-3100. Ship balled first advantage at 15:15 to T-3 100 and got to normal fill rate of 46,000 BPH. After night shift enriced and received the day crew furnover at 17:30, the new Board Operator necessary on computer line 17:305 had +1000 BPH flow into it wheat it should have been still. These was 21:005 had +1000 BPH flow into it wheat it for the 31:005 had +1000 BPH flow into it wheat it for the 31:005 had +1000 BPH flow into it wheat it for West in the complete of the 13:005 had +1000 BPH flow into it wheat had the should be should b	Unauthorized Cygnus Voyager discharge of crude oil la two tanks al same time insteed of only one	Near Loss	Closed	5/16/2011 3:30:00 PM	Richmond, CA - Refinery	14236

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	14975	14958	14951	14942	14900	14898	14886	14779	14666	14666	14639	14628	14552
	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinary	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Relinery	Richmond. CA - Relinsry	Richmond, CA - Refinery	Richmond, CA - Refinery
	5/29/2011 6:00:00 PM	5/30/2011 3:05:00 AM	5/28/2011 11:00:00 AM	5/26/2011 10:00:00 PM	5/29/2011 5:50:00 PM	5/28/2011 7:00:00 PM	5/27/2011 10:00:00 AM	5/26/2011 4-00-00 PM	5/25/2011 12:00:00 AM	5/25/201 ; 12:00:00 AM	5/19/2011 6:30:00 AM	5/24/2011 1:00:00 PM	5/24/2011 10:00:00 AM
	Closed	Closed	Clased	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
	Neer Loss	Loss	Loss	ross coss	Near	Near Loss	C 28	Loss	Loss	Loss	Loss	Loso	Nagr Loss
	Flare Gas Recovery discharge line to 4H2S	FCC opsolly violation.	Lube oil piping replacement on K-1070 was almost replaced with galvanized pips when it should be carbon steel.	Operator reported screeness and swelling in their right wrist.	V-1900 gassed out recusing the FCC flars to trip.	K-930 routed to both clean HZ and Rhenifer H2 causing comingling of dirty and clean Hydrogen.	Improper use of and potential exposure to carbon blaufide solvent.	Contractor worker feeling ## at T-3104 Tenk Cleaning Job Worker released back to work by clinic.	OCD Refinery Services Truck backed into car	QCD Refinery Services Truck backed into car	Wrong respirator cartridge ir was almost used for the hazard	RTD driver did not secure inline pump on back of truck.	clinic after complaining of repain in shoulder white moving crate of samples.
CVX EE, cthing the RTD forklift, was at the P&S Whise, to pick up an I&E JOBOX for delivery to the I&E Shop. When he positioned the torks under the JOBOX, they extended enough to partially enter a second patiet butted egainst	Shortly after RLOP's V-1800 gassed oid causing a flaring event, the pressures in Plare Gas Recovery went up. Onginally it was thought be interested from E-1051/E-1052, were plugging up, so operations started to water wash them. If was then discovered that 2nd stage discharge pressure had increased from 127 psig to 145 psig. Operations determined V-1082 overhead line to 4H2S was plugging up.	FCC stack opadly occurred when K-13B, TR set B-3 tripped off line.	K-1070 lube oil pidring modifications were being executed to support the control panel outwer work. The pidring contractor fishicated the galvanized pidring per the DED EWO and were about to install it when the Cherror construction new uses a common about galvanized pidring being installed on a tube oil system. The correct pipring is carbon steel. The loss is financial due to re-work the pipring confirmation had to order new materials and additional main-nours were required to complete the job.	Operator heard and fell a "pop" in their right write trying to break free a backwash valve on a Calgon GAC vessel. The operator cellams to have experienced an itinitial sharp pain that went away. The operator was able to continue working with continue sight disconding by the continuer sight disconding by which continue working or range-cirrotion issues and thought it would be tregisten about by morning. The operator did not report the injury to anyone and left at the conclusion of their shit. The killury was not disclosed until the start of the operator's next shit four days falser.	K-1910, the eductor for V-1900 in RLOP stayed open when the vessel was empty. LC-003 controls the objects, and this indication got stack at 2%. This caused V-1900 to briefly gas out, sending process gas to FGR causing flow to this FGC flare.	All approximatly 19:00 or 5/26/11, South Isomax operators found K-930 1st, and 2nd stage discharge wave open to both the clean 147 routings and the dirty 147 routing. At the time, K-930 was the designated compressor to be pumping Rhealdomar hydrogen. As a result, the Rhealformer H2 had been comingled with the Reformer H2.	FCC lab operalors potentially exposed to carbon disulfide. On 5/27 a QCD enginear used their stop work authority to prevent the further use of a solvent, carbon disulfide, which is used to clean the lab gas chromiceograph. The chemical was improperly labeled, handled and stored, Additionally, the solvent was being used in equipment not designed for this particular solvent. The MSDS classifies this product as a severe health and confect hazard and requires the use of specialized PEP when handled. The erea operator was not every fine the temperature of the these requirements and was not using the required PPE.	Worker feeling il and reported to safety red hat that he had a resh. Worker released back to work by cliric.	QCD Operator backed his Iruckinte a parked car.	QCD Operator backed his Invok into a parked car.	A North Defender Certifige Ne#75SCP 100 was almost used when testing maket for mercury hazards. A North cartificae No#150052 is required for innroury.	Driver did not secure P-2526A Inline pump on truck prior to driving away from the Crome Bay which resulted in the pump failing over which damaged some fulling on the regulated 4 serviceable pump. The fubling was replaced, the pump reliested and sent out same day.	sample malerial from Inside the XRay Laboratory to the outside perch. She lifted the crate veloping 32 45, walked 10 feet with the crate, tren lifted the crate to a shelf 3/6" from the floor.
	NL-Operational Process/Procedures - Safe Operating Limit (SOL) Exceeded	Environmental	Business Process	Irjury/Iline se	NL-Environmental - Release	Nt -Quality - Product Contamination (Int)	NL-Quality - Incorrect Product	Injury/iliness	Transportation	Equipment/Property Demage	NL-Lessons Learned	Equipment/Property Damage	NL-injury/liness - Employee injury
	(1) Why did the overhead line from V-1052 to 4H2S plug? PED believes it was ammonium bisulfide sait deposits formed from ammonia, H2S, and water that are present in recovered flare gas.	(1) Control board falled	(1) What: Engineer specified the incorrect plus class, and supervisor review missed the mistake. Why: Engineer was unawers of the requirements specific to kibe oil piping - is no galvanized piper.	(1) Human Factor	(1) Why did the FCC Flave Totalizer (rip7 Because FGR could not hardle all the gas flow. Why was FGR not able to handle? V-1000 gassed out, sending process gas to FGR. Why did V-1000 gass out? LI-003 hung up at 2% when level went to 6%.	(1) Why was K-930 discharge open to both clean and diry routines? Operator opened olean tide to halp troubleshoot issues with discharge pressure and forget to close. Why did the operator furget to close clean side touting verte. Vras working HO job and got delateded with other plant lessues.	(t) Previous OCD Chemist brought cambon disulfide into FCC its without managing the change. There was no MOC or RI.—313 instituted. If an MOC or RI.—313 insv chemical requests had been instituted, the lasue would have been detected and the problem sweeted, (2) Previous OCD Chemist brought carbon deutified into FCC also without mensaging the change. There was no MOC or RI-313 instituted. If an MOC or RI-313 new in change in the cambon of the cambo	(1) Liquid Alive not made to be atomized. A Nalco replacement has been found. (2) possible that liquid alive may have caused the irritation, but not conclusive. An attemate chemical will be substituted for the mitigation of colors. (3) Liquid Alive not meant to be atomized.	(1) Person was trained and very experienced but needed additional training on dealing with vehicles in his bind spot. (2) Orvor neglected to make sure eres was clear before backing out of parking	(1) Person was trained and very experienced but needed additional training on dealing with vehicles in his bind spot. (2) Unver neglected to make size area was clear before backing out of parking	(1) EE did not full understend the hezerd	(1) Fallura to properly secure load to truck	(1) An effort to sustain clear walkways in the Lab Porch area led to GCD employees storing the crates on a ledge higher than wast level.

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	15321	15314	16314	15302	15255	15252	15223	16176	15100	15085	15084	15067	15037
Richmond, 6/4/2011	Richmond, CA - Refinery	Richmand, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA Refinery	Richmond, CA Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery
6/4/2011	5/17/2011 12:00:00 AM	4/20/2011 12:00:00 AM	4/20/2011 12:90:00 AM	5/26/2011 12:00:00 AM	6/1/2011 8:00:00 AM	6/2/2011 6:00:00 AM	5/31/2011 12:00:00 AM	6/1/2011 3:00:00 PM	5/18/2011 10:00:00 AM	5/18/2011 12:00:00 AM	5/29/2011 4:30:00 PM	5/31/2011 10:55:00 AM	5/31/2011 6:45:00 AM
	Closad	Closed	Closed	Closed	Clased	Closed	Closed	Clased	Closed	Ctosed	Closed	Closed	Closed
	Near Loss	Rear Loss	Near	Near	Near Loss	Loss Mear	Near Loss	Near	Near Loss	Near Loss	Loss	Loss	Near Loss
	Refinery KPI's Energy Intensity Index and Utilization calculation tags "SSREF-EII' and "Utilization, viag' have Inaccurate results.	Unit of Measure on 2 cation creters were entered manually incorrectly into SAP.	Unit of Measure on 2 canton oxides were entered manually incorrectly into SAP.	CME monthly report delay. Treubleshoot application error	Green Card - reports that MOC process is being short cut	Green Card - Report of equipment being placed in service before MOC complete	Keys left in tork lift while unattended	Poscible back injury	material required was 347 SS and when PMI was done it was 321 SS, also r material was stamped 321 SS	Trunking Repealer #2 weakening	Environmental On-Calt lost pager in offsite park and it was not recovered.	Mechanic was moving patiet when a popping was fell in his fower back causing discomfort in his logs. Mechanic was taken to the clinic for evaluation	Mator Crapped by RTD Forkin
During heavy rains, F-305 got 2 positive draft indications greater than +.4 inches for more than 20 seconds and caused the FSC Dampar to trip. This	Reliable monitoring and raporting of the Relinary KPI's Energy Intensity Index and Utilization calculation lags '95REF-EI' and 'Utilization way were degraded because of eratile results. Since they are key process indicators (KPI) of relinary performance many VIP stakeholders were concerned.	in March and April 2011, two new carlocs were created in OCS but the pricing in the contract was not act up in SAP. Dute to this, the plant purchase related to manually create the Po's in SAP. Since pricing wes not set up, it was actives to use a tilese amount of \$500 with the understanding that this would need to be changed when pricing was confirmed by the supplier. White entering the PO in SAP, this purchaser accidentally antered the unit of measure as a tiper, instead of 1,000 per, which was not caught by the purchaser or the supplier. The PO was consetted before it was processed for payment, but not before it was seen by Finance as a period to the supplier. The	In March and Apdi 2011, two new carlons were created in OCS but the pricing in the confract was not set up in SAP. Due to this, the plant purchaser had to menually create the Po's in SAP. Since pricing was not set up, it was advise to use a false amount of \$500 with the understanding that this would need to be changed when pricing was commed by the supplier. While nothering the PO in SAP, the purchaser accidentally entered the unit of measure as 1 par, insisted of 1,000 per, which was not caught by the purchaser or the supplier. The PO was corrected before it was processed for payment, but not before it was species and by Financa as a potential 3 million dollar epond.	The Richmord Refilery Environments group's Computer Montloring Emissions (CME) monthly report delivery to a regulatory agency was delayed by one day. Time and effort expanded by customer and IT support to troubleshoot the problem.	Green Card - report thet MOC process is being short cut end that construction is stating before an HSE is completed or all the other necessary approvals have been given.	Green Card - Equipment is being placed in service before an MOC (possibly a femporary MOC) has completed an HSE) and without a PSSR being completed.	Incident Description: Operator was running the pail palletter for 45 mins when the needed to use the rest con. He tried to get assistance from others in the work eres hawmer paracra were buty and no immediate reliaf was available. At the first evaluate opportunity the operator forwal the forbit to the rest from The Operator failed to remove the keys from the forbith prior to going to the instruction. During a walk through the forbit was found left unattended with the keys in the fighter.	Operator felt back pop as they bent ever.	Adjunkin delivered PO 10088732.3 line flams that required PMf first 2 line flam were PMf with out incident. Third first liem (flange) shot 321 SS and we ordered 347 SS also can't were incorsel (klamped 374 SS).	Repeater control signaliting weakened due to tots of interference and could have caused radios to not work. Systemed starmed me before problems noticed.	Environmental On-Call pager was dropped accidently and lost at an offsite park.	Uschanic was moving a patiel witso he feit a pop in his lower back. At that street a liscomort to his legs. After a write the mechanic still reit a little discomfort in his legs and decided to go to the clinic to be checked out.	the first pallet. The second pallet contained a 75 HP motor. When the forks were relised and the forfill was backing up, the motor was unintentionally mound. Because of this partial pallet engagement, when the motor reached the end of the palations, it flipped 190 degrees falling approximately 3:
NL-Operational	NBusiness Process - Business Interruption	NBusiness Process - Financial Reporting	NBusiness Process	NL-Business Process - Business Interruption	NL-Business Process - Business Process	NL-Bushess Process - Business Process	NL-Business Process - Business Process	NL-Injury/illness - Employee Injury	NL-Quality - Product Quality (Ext)	NL-Business Process - Business Interruption	Equipment/Property Carnege	เก]มา/illness	N Equipment/Property Damage • Equipment Damage
(1) Investigation is incomplete and no root cause has been		(1) Why was the unit of measure in SAP incorrect? these were new cardons and the contract was not updated in SAP yet. Why? Pocularment was pending a response from venior. Why? due to being a new item, so the prochaser had be enter the order manually in SAP, but did not review entry. Why? this is not an every day actions and it takes more time and effort.	(1) Why was the unit of measure in SAP incorrect? these were new canons and the conflict year not updated in SAP yet. Why? A rocurement was pending a response from vendor. Why? due to being a new item, so the purchaser had to enter the order manually in SAP, but do not review entry. Why? this is not an every day actions and it takes more time and offer.	(1) The error message was feolated but the root cause was not determined. The error was tracked down to a material code which had a few sub properties that were not defined.			(1) Five Why's: Operator needed to use the rest com, he drows the fortist to the sest room and failed to remove the keys prior to using the rest room. Why? Operator was cocased on another less and did not lake the time to remove the keys. Why? Dotog'the be according to procedures or the keys. Why? Dotog'the be according to procedures or scoepiable practices takes more time a effort to remove keys from fork III Root cause; Pragrant Behavior.				(1) Inadequate training and funrover procedure for Environmental On-Call personnel., (2) Lack of communication of expectations.	(1) possible muside fatigue	(1) Past practice to not have pallets hack to back and did not get off forbilt to check

		Green Card - While conducting a LOTO audit, audiors also noticed a potential						
	NiFire/Explosion	Green Card - Vrisie conducting a LOTO audit, auditors also noticed a potential issue with which entry into operating units. Ri-341 (under ron-opera flame permits) says vehicles can enter & leave the plant work-site without drains within 50 test being covered as long as they are escorted by an operator with a gas tester.	Green Card - Gas tasting for Vehicle Entry into Plants	Near Loss	Closed	, 6/8/2011 10:00:00 AM	Richmond, CA - Refinery	15705
	NL Equipment/Property Demage - General Liability	Mechanic leaving #3 District mainenance area backed into a bruck parked at the IMI building.	MVC Mechanic backed company truck Into parked compamy truck.	Near Loss	Closed	, 6/9/2011 12:00:00 AM	Richmond, CA - Refinery	15095
	NL-Business Process - Business Interruption	Gateway stopped transferring data to the wireless system data coming into it was not available during this time.	Viroless galeway stopped communicating	Near	Closed	5/9/2011 3:00:00 PM	Richmond. CA - Refinery	15680
	NL-Lessons Learned	Grean, Card Orlving behind a contractor's truck; contractor's truck had lowflat ties on near left side. His rear window was forged with moming dew; he could not see me dereilly. Location: 2,14 Main.	Green Cerd. Contractor truck had low/flat tire. Location: 214 Main	Near	Closed	6:15:00 AM	Richmond, CA - Refinery	15592
	NL-injury/illness - Employee injury	Green card - SUV leaving Tech Center parking lot roffed through stop sign and cut in front of me on way to main gate as I was lumning left to enter fol.	Green card - SUV ran slop sign in front of Tech Center	Near Loss	Closed	5/26/2011 8:55:00 AM	Richmond CA Refinery	15490
	NL-injury/il/ness - Contractor injury	Green card - SUV leaving Tech Conter parking tol rolled through stop sign and cut in front of me on way to main gate as I was turning ten to enter tot.	Green card - SUV ran stop sign in front of Tech Center	Near Loss	1 Closed	5/26/201 8:55:00 AM	Richmond CA - Relinery	15490
(1) Why fruck was over weight? Older was placed for too much weight: 43,000 lbs vs. the required maximum of 42,500 lbs. Why? Alveys placed order by the no. of paliets in the past. Why? Weat not familiar with State weight regulations. Why? It is not openfied in the work instructions.	NRegulatory Compsiance - Non Compsiance - Non Weilphis & Measures	Order #807988, an inbound from SSA Houston to RLP was entered \$123/11, with seven different products on it, equaliting 20 out paties and weaking 43,252 bs. This inbound is an intermodal shipment from SSA that was assigned to JB Hunk Transportation to pick up and deliver. JB Hunk picked this assigned to JB Hunk Transportation to pick up and deliver. JB Hunk picked this criter the around 1910 and an adequated to the scales to check the leads weight, it was found that this bod was about 1,000 bs overweight for Ceitformia regulations, but not Tezas. Due to this criter being everweight. JB Hunk that to take the load back to SAS and re work it. It was the understanding of the purchaser that loads could be up to, but no more than 44,000 bs. but this is	Inbound from SAS Houston to Ricmond was	Near Loss	Closed	6/6/2011 11:30:00	Richmond, CA ~ Refinery	15486
(1) Why truck was over weight? Order was placed for loo much weight: 43,000 its vs. the required maximum of 42,500 its. Why? Aways placed order by the no. of pallets in the past. Why? Was not familiar with State weight regulations. Why? It is not specified in the work instructions.	NL-Bushass Process - Abnormal Freight	Order #86/7888 an inbound from S.S.; Houston to RILP was entered £6/23/11, with seven different producte on it, equaling 20 total pallots and weighing 40,252 bs. This inbound is an intermodal shipment from 5.58 that was assigned to J.B. Hunt Indexed this assigned to J.B. Hunt Indexed this assigned to J.B. Hunt Indexed this description of the loads weight; it was found that this load was about 1,000 lbs overreight for California regulations, but not Tears. Due to this order being overweight. J.B. Hunt had to lake the load back to S.K.S and re work it. It was the understanding of the purchaser that loads could be up to, but no more than 44,000 bs. but this is	Inbound from SAS Near Houston to Ricmond was		Ciosed	, 6/6/2011 11:30:00	Richmond, CA - 15486 Refinery	15486
(1) Why truck was over weight? Order was placed for too much weight: 43,000 bs vs. the required maximum of 42,500 bs. Why? Always placed order by the no. of patiets in the past. Why? Was not familier with State weight regulations. Why? It is not specified in the work instructions.	Ni - Lessons Learned	Order #88/7868, an inbound from SAS Houstion to fit IP was entered \$27211, with seven different products on II, a qualiting 20 total pallials and weighing 43,352 this. This inbound is an infermedal shipment from SAS that was assigned to JB Hunk Transportation to pick up and deliver. JB Hunk picked this assigned to JB SHank Interesting the product of the scales to check the loads weight; it was found that into advast about 1,000 the overreight for Ceitifornia regulations, but not Tozas Due to this order being overweight, JB Hunk had to take the load back to SAS and re work II, It was the understanding of the purchaser that loads could be up to, but no more than 44,000 lbs, but this is	Inbound from SAS Houston to Ricmond was	Near	Closad	, 6/6/2011 11:30:00	Richmond CA. 15486 Reinery	15486
(1) V-913 high level Trip S/D K-958/780, Due to Alvection Stanva on Shuldown swilch being stuck at the to of it's enclosing (tribe.	NIOperational Process/Procedures - Plant Run Out/Stow Down	At 4.30 PN 8/8/2011 K-350 and K-360 tripped on 1st slage Knockoul V-313 light level S/D. The outside operator first on the scene noticed the 2 Independent level shotclater seeding (8.7% and 20 % respectively 63Lc813 and 63Lt913A-The High Level S/D font chamber was drained and about a cup of water was observed. The High level shuddown was still ackee at this line mechanism when the S/D slarm cleared. The compressors would not restent until the High level shuddown at small serves a the control of the S/D slarm cleared. The compressors would not restent until the High level shuddown at narm was bypassed, There is a fine limit on the S/D permissives that clears in 1 hour. The high level S/D bypass will stay in bypass until we get the permissives back. Operations in continuously monitoring the 2 independent level incications will then.	K-950/950 H2 booster Compressor Studtown on 1st stage knockoud pot V- 913 high leysetrip.	Coss	Ciosea	4:30:00 PM	Richmond, CA - 15447 Resney	15447
	NL-Business Process - Business Interruption	Rado Communication was lost	Lost Radio Communication	Near Loss	Closed	6/5/2011 10:10:00 PM	Richmond, CA - Refinery	15369
Identified. The ABU has decided to close the investigation and continue to track this issue via the OERI database	Process/Precedures - Safety Systems	opened all 4 stack dampers to 100%. If the draft indications had gane higher than +.8, the furnace would have gone to Min Fire.	Near F-305 Stack Damper Trip Loss due to heavy rains		Closed	12:20:00 PM	CA- 15338 Refinery	15331

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15998	15962	15962	15899	15893	15856	16856	15804	15769	15759	15739	15705	15705	15705
Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Rafinary	Richmond CA - Refinery	Richmond CA - Refinery	Richmond CA - Refinery	Richmond, CA Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Rafinery	Richmond CA - Refinery	Richmend CA - Retinery	Richmond, CA - Refinery
8/13/2011 8:51:00 AM	5/14/2011 3:00:00 PM	5/14/2011 3:00:00 PM	9:40:00 AM	SH 1/2011 12:00:00 AM	9:00:00 AM	5/8/2011 9:00:00 AM	1	6/10/2011 11:00:00 AM	6/10/2011 11:00:00 AM	6/10/2011 5/30:00 AM	6/8/2011 10:00:00 AM	, 6/8/2011 10:00:00 AM	6/8/2011 10:00:00 AM
Closed	Closed	Closed	Closed	Chosed	Chased	Closed	Closed	Closed	Ctosed	Closed	Closed	Closed	Closed
Near	zso! Loss	Loss	033	Near	Near	L Near	Loss	Loss	Loss	Near Loss	Near	Loss Ne <i>a</i> r	Near
Product physically loaded on bulk frack but precessed complete in the sysem at zero.	Forki ft hydraulic hose leak	Forki fi hydraulic hose teak	Steam Hose failed while being used	PED generated temporary operating instruction indicated the wrong determined that the second control of the se	Green card - encountered driving wrong way at Castro to Chovron Way	Green card - encountered driving wrong way at Castro to Chevren Way	While loading drums on pallets doubled stacked, side well of trailer was damaged	Employos was driving on Quarry Rd., hil a ballard white lurning	Employee was driving on Quarry Rd., hit a bellard white turning	RLOP steried up on 3166 getting a rate of 350 pph needed 450 to sech minimum rate. Discovered AOV 108 not fully open	Green Card - Gas testing for Vehicle Entry into Plents	Green Card - Gas testing for Vehicle Entry Into Plants	Green Card - Gas testing for Vehicle Entry into Plants
Bulk truck orders? 242392 for Ed Slaub & Sons Pelitolleum was scheduled to lead time products from RLP, 6/1911 at 7 am and it idd. 2,003 gals of the Chv. Reach Ind to 64 was loaded, 3,497 gals of the Chv. 1000 Thi was loaded and 1,453 gals of the Chv. Suprame Mo 5-400 was loaded. But, whan running the paper workpill of Isating and paching stip in OCS, the Chv. Suprame Mo 6-400 (22001999) are completed at sero, which means the 1,452 gals loaded did only gal toducted from hivenloy, the paper work reflected that the customer was going to receive zero and gals blief for zero.	Hydraulic hase on gradall ruptured and sprayed hydraulic fluid on pavement and drift near (T-1506).	Hydraulic hase on gradal rupkuled and sprayed by draulic fluid on pavement and diff near (1-1558).	Operator washing down equipment using weten/steem combinetion. Hose failed approximately 3" from nozzid white being used, making contact to Operators tell arm and left feg.	PEO Issued a temporary operating instruction stating the RLDE PNF would switch from a 220R to a 600R block on Saudray (614 t) high shift in contradiction to the Lube Plan's schedule of Sunday rightshift in product inventor disruption. Near Loss in temptation of HAP 220R block, and threntaty of disruption. Why 1. Operating right have changed feeds 1 day permitters why 2. Temporary Operating right instruction indicated the wrong date, Why 3A. DED generated the Toll with the wrong date. Why 3B. Operations signed off on the TOI containing the wrong date, (Root cause; Lack of Indiagratis procedures). Why 4A. Process Engineer invested the Lube Plan and mistering indiagratis procedures. Why 4A. Process Engineer invested the Lube Plan and mistering indiagratis procedures.)	Green card - I was turning right from Castro to Chevron Vilay and scountered a car on Chevron Way fiscing the wrong way (facing Castro). This is the second time five this teppen.	Green card - I was turning right from Costro to Chevron Yey and ecountered a car on Chevron Wey lacing the wrong wey (facing Castro). This is the second time I've this happen.		Damage to left front panel of truck	Damage to len front panel of truck	RLOP had b down grade production for an four until the larget rate could be achieved. Started RLOP UCBO feed at about 3am, Rate increased to 350bph. Recieved a call from RLOP at 420am saying they needed a higher feed rate walked out tine and found AOV 108 in the field, it looked not fully opened. Stroked air to sake until heard flow horease. Feed rate increased to 500bph to need flow required.	Green Card. While conducting a LOTO sudi, auditors also noticed a potential lassue with which a mitty nino speculing units. Ri-741 (under non-speculium; permasi stays vehicles care enter & leave the plant work-site without drains within 50 feet being covered as long as tiney are ascorted by an operator with a past lasser.	Green Card. While conducting a LOTO audi, auditors also noticed a potential lease with which a nitry rine senseling units. Rf.241 (under non-open farms permits) also whiches can enier & leave the plant work-site without creins within 60 (set being covered as tong as they are secured by an operator with a gas lesser.	Issue with vahide entry into operating units. Rr.341 (under non-open flame permits) says vehicles can enter & teave the plant work-site without drains within 50 feat being covered as long as they are escorted by an operator with a geat tester.
NL-Bushess Process	NL-Regulatory Compliance - Non Compliance - Air	NL-Environmentet • Spill	injury/iliness	NL-Operational Process/Procedures Flant Run Out/Slow Down	NL-injuy/iliness - Employee injuy	NL-Injuyilliness - Contractor injury	Equipment/Property Damage	Equipment/Property Damage	notsnodsnerT	uwoDuno nustra n	NL-injury/liness - Contractor injury	NL-injuryiliness - Employee injury	M_Business Process - Business Process
(1) Papework was incorrect and was not worlded by terminality operator before it was issued to driver/dustomer. why? Operator or THO manually keyed driening amount from the actually transaction, he could have let ICCS automatically enter number into invoice. Why? Operator did not ready his papework before giving it to the driver, why? Operator was his papework before giving it to the driver, why? Operator was his complete load and get the driver, going so there would be no demurrage for the order, why? Operator chose production over accuracy.			(1) hose was stressed internatly from used and not visiable from inspection	(1) Operations signed-off on the temporary operating instructions containing the wrong date of the planned feed which, (2) The process Engineer misroad he Lube Plan and misraternly entered the date on the TOI one day shead of the plan.			(1) Side well of trailer was damaged Why? Contractor loading drums into trailer clipped the side well support. Why? Cenne in at loo sharp at an engle. Why? Used the wong method for postioning paties on floor of trailer as operation has done in the past Why? Didnt perform the orugh anough LPSA.	(1) lack of attention to work area	(1) lack of atlention in work erea	. Air Operated valve not fully opened			

(1) se failed to use stop work or pause work to follow where the communication the could go, se's left they needed to get nostsy part of the job done so they would not disturb workers inside of office.		WHE ELECTRICAL WHE RUNING PAYELLEL OF STUD NOTICED WHE WAS CUT BY SAWE ALL OF STUD DID NOTICED WHE WAS CONTROL OF THE STUD NOTICED WHE WAS CONTROL OF THE STUD NOTICED THE STUD NOTICED WHE WAS CONTROL OF THE STUD NOTICED WHEN THE STUD NOTICED NOTICED WHEN SAWE WAS ALL OF THE STUD NOTICED WHEN SAWE WAS ALL OF THE SAW	THE REMODUNG HAZ WASTE EXTERIOR OFFICE ACCIDENTLY CUT COMMUNICATION LINE IN WALL	258 268 268 268 268 268 268 268 268 268 26	Clased	6/20/2011 8:00:00 AM	Richmond, CA - Refinery	16284
	Nt.• Equipment#roperty Damage - Equipment Damage	Upon removing plastic from around a valve and MOV from Tank 3104 at the flydroblast pad, the load shifted causing the valve to fall, landing on the MOV, causing damage, Fortunately this assembly was designated for scrap.		Near Loss MC	Closed	6/17/2011 9:00:00 AM	Richmond, CA - Refinery	16277
	Nt-injury/liness - Employee injury	Grean Card Tesh Cender Slainwell Lights Not Working Employee curse in on a Sunday to due after house of work. They normally take the stairs, After walking up a flight, the door behind them closed and they resulted that the motion detector lights had not come on. The employee held the hand-rail and slowly walked back down the stairs.	Green Card - Tech Conter Stainwell Lights Not Working	Near Sta	Closed	6/19/2011 9:30:00 AM	Richmond, CA - Refinery	18238
	NL-tnjury/iliness - Confractor tnjury	Green Card Tech Cender Stainwell Lights Not Working Employee came in on a Sunday to do a few hours of work. They normally take the saits. After walking up a flight, the door behard them dosed and they realized that the motion detector lights had not come on. The employee not of the band-real and stowy walked back down the stairs.	Green Card - Tech Center Stairwell Lights Not Working	Near Str	Closed	6/19/2011 9:30:00 AM	Richmond, CA - Refinery	16238
(1) Personal factors - doing the Job according to acceptable practice takes more time / effort	NL-injury/iliness - Employse injury	Operator during washing down his plant He had to walk through some staging and as he pulled the horse he pressed the trigger to wash down hose it went off and hit the top of his hand and it burned him	Burn (op of hand with wash down hose	Loss do	Closed	6/18/2011 10:00:00 PM	Richmond, CA Refinery	16199
(1) Personal factors - doing the job according to ecceptable practice takes more time ! effort	injury/illness	Operator during washing down his plant He had to walk through some stegling and as its pulled the hoes he pressed the frigger to wash down hose it wont off and hit the top of his hand and it burned him	Burn lop of hand with wash down hose	Loss do	Closed L	6/18/2011 10:00:00 PM	Richmond, CA - Refinery	16199
	NOperational Process/Procedures - Plant Run OutStow Down	On 618 hightship, operations noticed a teak on k-621 tiple of filter housing drain line 5tr. K-520 tiple booster compressor. What steried as a minor leak continued to get worse and became a bleady stream. Ope attempted once to move the indient first carefully, in a tightening movement and saw the teat get sightly worse. This filter housing is not letableth from the bub of lay sterie so a steady worse of the filter housing is not letableth from the bub of lay sterie to a steady worse of the filter housing his not letableth from the bub of lay sterie as a steady worse in the filter housing his not dependent was made to move as much possible damage is the machine. The decident was made to move as much compressor is 50 and depressured at the time and the lubbo of system is exultiown. TKN out 2MBPD lead as a result of the less of K-930. The	K-830 Shuldown due to Lube oi leak	Near X.	Closed	1	Richmond, CA - Refinery	16199
(1) Operations is loo close to the lids/operings when inspecting the liquid tevel in the separator. They must put themselves in the line of the to open the lid.	NL-Operational Process/Procedures - Safe Operating Limit (SOL) Exceeded	Cperator's HDS monitor went off while he was opening the hetch on the recovered of cell of #2 separator.	Operator's H2S monitor alarmed	Near Op	Closad	6/18/2011 1:35:00 PM	Richmond, CA - Refinery	16191
(1) Employee made a normal turn to look beckwards after স্থাতটাৰা জামুঠিত্যৰ স্থোধি চাই চৰনাৰ.	ไกรู้บาร/กิโก-ess	A crew of two employees were moving furniture and office meterials from Gentinal Maintenance to 214 Main St. While welling for the other Coworker to bring out some boxes that needed to go to 8 warehouse, the other worker towered the lift gale of the truck to the ground. As the worker exited the building he called the other workers a name causing him to furn around. As he furned, the employee felt a pain in his left fonce and lower back. Because his foot was up against the lift gale, if restricted his range of mollon possibly causing a strain.	oyee possibly ed his left knee and	Empi strain	Closed	6/16/2011 1:15:00 PM	Richmond, CA - 16 104 Refinery	104
	NL. Equipment/Properly Damage - General Liability	I was troubleshooting an equipment (aut on the pail patelizer when it discovered that an excitral conduit bank on the side of the pateliter had been stuck, pockably by a loxidit. The outside conduit is bent inward and no longer properly champed and wit; have to be replaced.	Pail palletizar conduit struck by mobile equipment.	Near str Loss eq	Clased	6/16/2011 11:45:00 AM	Richmond, CA - Refinery	16098
(1) SOS: Training & Procedures: Workers Exposed to Furnes Workers were on top of T-3197. Workers were unsware of possible HZS (sulful) gases venting out of the tank. No JSV comploided, (2) SOS: Training & Procedures: Workers Exposed to Furnes. Furnes (gases) vented out of vexuum breaker/ pressure refer (venta) on tank (con). Hot ambient temperature from heat of the day contributed to emissions from tank vents.	រាប់ការប្រាស់ពីសេខឧន	2 Mistras Technicians were setting up rigging on the wind Girder of T-3187 were exposed to suffer furnes which made them light headed	exposure to tumes	Loss ex	Classd	6/14/2011 3:00:00 PM	Richmond, CA - Refinery	16027
(1) Papawork was incorrect and was not varied by terminating operator before it was issued to driver(customer, why? Operator or THO manually keyed differing amount from the actually funcation, he could have felt OCS automatically enter number into invoice. Why? Operator did not selvew his paparwork before gloing it to the driver when he to much the complete lead and gal the driver going so there would be no demurrage for the order, why? Operator doose production over securety.	NL-Quality - Paperwork Incorrect/Not Sent	Bulk truck orderif 242392 for Ed Slaub & Sons Petroleum was scheduled to ad hine products from RLP, 61/3471 at 7am and k did. 2,003 gaits of the Chy Rando Hd iso 46 was loaded, 3,487 gaits of the Chy 1000 Tiff was loaded and 1,483 gaits of the Chy 1000 Tiff was loaded and 1,483 gaits of the Chy 1000 Tiff was loaded and 1,483 gaits of the Chy 1000 Tiff was loaded and 1,483 gaits of the Chy 1000 Tiff was loaded and 1,483 gaits of the Chy 1000 Tiff was loaded and 1,280 gaits of the Chy 1000 Tiff was campleted at zero, which means the 1,453 gait loaded did not gait adducted from Invaniory, the paper work reference that the customer was going to receive zero and got billed for zero.	Product physically toaded on bulk truck but processed complete in the sysem at zero.	Near pr	Closed	6/13/2011 8:51:00 AM	Richmond, CA - Refinery	\$699B

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16360	18320	15319	16298	18290	16265
Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond,	Richmond. CA - Refinary	Richmond CA • Refinery
6/13/2011 7.00:00 AM	6/16/2011 17:00:00 AM	6/18/2211 12:00:30 AM	6/182011 6/11/20	8/20/2011 3:40:00 PM	6/20/2011 9:00:90 AM
Closed	Closed	Closed	Closed	Closed	Cosed
Near	Loss	Logg Near	LOS E	L Near	Loss
Green Card. Blast resistant bidg propped open with broom and Acids and bases all mixed obovorballow the fume hoods. Location:	Warehouse 4 door was hit by forklift & damaged	Lights in Warehouse 4 were on all weekend	The DWOP Compliance monitor and physiose feed outs were black due to an apparent loss of power.	SELC832 (C832) isval indication topsed out at 74%. The levels carlled over the top to V840 (K840 knockoul). The high sevel alarm on V840 atd not activate and the level continues to rise sausing K840 to shutdown.	In Bid Braully CZ sensor (main brain and Braully CZ sensor) (main brain and
Green Card. Blast existent beliding found to have west door propped open with broam hands in hings erea. Actishbases all risked above end below the furnis hands, Location: Crinching/FCC/Alify Lab	Warehouse 4 door was hit by forklift & demaged, making it difficult to open & close.	Warehouse 4 lights were on all weakend, doors were all locked up didn't see an obvious prioff switch	At approximately 9:45 am on Safurday, 6f18, while checking on electrical maintenance work taking place in the DWOP shock, operations became aware of the base of roadouts from both the DWOP compliance monitor and ph probase at the DWOP shock, the probase of the state of the shock of the shoc	58LC832 (C832) level indication topped out at 74%. The level carried over the top to V840 (K840) knockout). The high level attern on V840 did not activate and the level continued to rise causing X840 to shuddown, in an attempt to restant, K450, the level in V440 was blown down to relief. This caused the FCC totalizer to trip.	Anna Vicioria @ Barth 1 had a faulty O2 sensor that creeind a rich burn in the 10S botter, After changing the sensor out, the 10S system was restarted, and the soot that was build up in the boller was flushed out the overboard discherge. Cargo and 10S operations shul down immediately. There was no visible sheer, associated with the soot, Notification went out from Wharf and Vessel (via O'Brien's).
ML-Lessons Learned	Equipment/Property Damage	NL-Business Process - Business Process	NL-Regulatory Compliance - Hon	NIOperational ProcessProcedures - Safety Systems	Environmental
	(f) Whis enliry door was demegae? Whity? Operators in the past used forks to open door Why? Door was hard to open the was the past used forks in open door Why? Door was fail on tower below causing alignment to be off, why? Operator didn't look back when backing up, (note) Door was damaged over 5 years ago.		(1) Sidebart Issues: There is no elarm for less of UPS commen feculis communication to the 300 compliance and upresent plants. (2) Sidebart Issues: The UPS was never configured to time I date and elarm set points. (3) Sidebart Issues: The date services of the UPS was never configured to time I date and elarm set points. (3) Sidebart Issues: The data collection was found to not be working. There ele no operator three stemps in the collection was found to not be working. There ele no operator three stemps in the collection was found to not be working. There ele no operator three stemps in the collection was found to not be working. There ele no operator three stemps in the position of maintenance have not defend the not up to positions and electrications for the job that day (as nequired per Richton) on the shelter/forecome the day prior and had discussed the job site as required. The next depresent the electrications came back to conflue working on replacing the beacon, they again talked to operations and discussed the job for the day. The operator signed them in on the work order from but did not walk the site as there were no changes from the day prior and had do prior and the day the operator was constacted via radio by the electrication of parameters. Serie work practices for isolation and release of equipment (LOTO: bock-outlag-out procedure), where not of blowed as registed one Refinery Instruction Ri-3800 Control of Hazardous Energy and Ri-388 Electrical Safe Work Practices.	(1) Why did Ke40 trip? Liquid filed Y640 and tripped high level shuldown. Why did liquid the the shuddown? Liquid overnitied C632, Upstream or V640 Why did C632 C8Ty over liquid? Its level controller malfunctioned. The LC appeared to calch the level and hold at 744, although schall level continued to fase over 100%, (2) Why did operator monitoring of C632 level not resognize potential bad reading from level continued to fase over 100%, (2) Why did operator monitoring of C632 level not resognize potential bad reading from level controller? Operator believed moves made outside to open up on block yether downsurearm of suspect LV were activated to open up on block yether downsurearm of suspect LV were activated to calch the level. Operator thought LC showing level flatlening out at 74% indicated level was sunder control.	(1) A sensor failed creating a rich burn in the ISS boller. After changing the sensor out, the ISS system was restarted, and the soot that was built up in the boller was flushed out the overboard discharge.

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18432	16432	10303
Richmond, CA.	Richmond, CA.	Richmond, CA •
8/21/2011 4:30:00	6/21/2011 4:39:00	6/21/2011 4:15:00
Ciosed	Ciosad	C is
	LOSS Negr	Coss
Hydrog	Hydrog	
Hydrogen Leak at R320	on Ceak	R-120 autlet spool look
R R R R R R R R R R R R R R R R R R R	Hydrogon Leak at R320	ool feek
IOP NAVESTIGATION (see Investigation, oburnal or link on left for TOP description); Initial description, high pressure bydrogen back/clease occurred at R320 Cpenalisms and the hydro STI, were await on this tenk/cleases, but laided to immediately report this teak/desses to Chervon Fire Opperfinent, indirect conflict with R1.451, Section 5. This ted to a dealy in smegn, in direct conflict with R1.451, Section 5. This ted to a dealy in smegn-ray response. Had the leak/release gone to catestrophic, and with the close proximity of the A Train furnace, this could have been a far exponse rather than a leak/release response, (What is the worst thing that can happen?) When CFD entired on scare, operations per samely were inside the Hot Zone base (which Operations put up) attempting to place steam tences on the sponse? We (CFD) were then told not to use water because of concerns of the leak. We (CFD) were then told not to use water because of concerns of the leak. We (CFD) were then told not to use water because of concerns of the leak. We (CFD) were then told not to use water because of concerns of the leak. We (CFD) were then told not to use water because of concerns of the leak with CFD and the leak of evidence that it occurs by many design engineers in the past. Again, had there been a catastophic failure, there would have been posture when attempting to dispares the hydrogen in view of the disease posturity to the AT rain furnace. Lestly, once high now water had been directed toward the leak/release (due to it becoming greater in relies and volume), leve operators and tence to the leak of the world have been of the form the force of the commander, and the leak of the leak of the world have done whorld consent from the location of the leak of the world have one past than LCFD would not let the world have person to support the most group parsonnel were upsat that LCFD would not let the leak of the le		R-320 developed leek on slattup ges return fine.
NL-Operational Process/Procedures Safely Systems	NIBusiness Process	Едијрлеп/Руореrty Овитедо
(1) Dayshift H.O. & STL Left The Incident Scene (shill turnover time). (2) Chevron Fire department (CFD) PP) did not follow Ri requirement, (3) Days HO was not notified of incident Comment (3) Days HO was not notified of incident Commend by CFD or STL, (4) Stobbar Issue. Resultant on pipe came off during incident, (5)) Sceoar Issue. Need to practice offeney-wide broldent Command Response by pothetical to ease use and demillarity with Instruction	(1) Dayshit H.O. & STL Left The Incident Scene (shtill bursever time), (2) Chenron File department (CFD) PP) did not tolow Ri requirement, (3) Days HO was not notified of Incident Command by CFD or STL, (4) Sidebar Issue, Russilion on pipe came off during Incident, (5) Sidebar Issue, Need to practice ortimory-wide incident, (5) Sidebar Issue, Need to practice ortimory-wide incident, (5) Sidebar Issue, by Ppothetical to ease use and familiarity with instruction	design and construction about 45 years ago in 2016, the 4-inch elbow defail was reconfigured to a 2" ratin mede of 204ss, though it was inefactive in preventing tarthoric add corresion at the 10" elbow. (2) The low-points of the original dead-deg design are prone to certoric add corrosion danage. Operating the original line configuration differently may elimitate the need for a piping godesign. (3) The Trickness Measurement Location (1fML #24) on the falled elbow had been deadlived for several years. Past bisciness monitoring could have count both the thin area prior to failure and/or characterized the corrosion rate as a short-term risk. (4) The business until employed a minimum scope philosophy towards assessing the 12-X. Train 10 2010 T/A work list. Least-cost laren-minimum repoils were favored over long-term couldons, and imited more effective solutions from being implemented during the Feb 2010 repairs and/or 102010 H2-A Train T/A.

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16874	16512	16581	16571	10553	16551	16519	16499	10492
Richmond, CA . 16614 Refnery		Richmond, CA - Refinery	Rehmand,	Richmond, CA - 18553 Refinery	Richmond CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Relinery
9/24/2011 10:00:00 AM	Richmond, 6/24/2011 CA - 0:00:00 Refinery AM	8/23/2011 4:00:00 PM	6/23/2011 7:40 00 PM	923/2011 12:30:00 PM	6/22/2011 9:00:00 AM	6/6/2011 12:00:00 AM	8/21/2011 9:15:00 PM	8/22/2011 12:00:00 AM
Closed	Closed	Closed	Closed	Closed	Cresed	Closed	Closed	Closed
Loss	Noer Loss	C Sel	Loss	Ne ar	5	Near Loss	X-bar Loss	LOSS. New N
C-1050 Level indication Casused HNFto be rouled off test	inadvertentShutdown of K- 930	Green Card - Projector in TC-346 left on evernight	P-733A seal leak caught fire and was quicky guiley and was quicky exilipate while Head Operator was wellfying isolaton of pump.	During a test to mary the 280 and 281 lines together the valve used to ty the line became stuck in the open position	Tank gauges lest during planed shutdown	Employee was not sent heir written Job offer in a limely manner	Gall Out Failure	Green Card - Water leak, minor staining of back stairwoll
experiencing d d lin lin sue.C-1850 close and to repair one to on auto 13.50 PM.	At 8.am. While doing routine temporature checks on K-930, the compressor shuldown without warning. Operations I field a restant on K-930 but it did not restant. K-940 was started and electricions were called in to troubleshoot. No cause for the shuldown has been found at this tima. At ZPM operations reflampled to restant K-930 and it solands electricians looking at Shuldown timer. Troubleshooting continues on timer and cause of shuldown.	Green Card - Projector in TC-349 left on overnight. No room reservations shown the 623 - 50 not possible to identify responsible work group.	On MC2011 at 7:40 pm white the freed Operator was verifying isoslition of the pump. P-733A as all leak caught fire and was quickly extinguished. On 672111 ingit shift P-7335, was just in service following JHZ A-Train typest, for stem load and, On 672111 ingit shift P-733A, was buy in service following JHZ A-Train typest, for stem load ched. On 672111 ingit shift at 7:45 pm Operations discovered that the curbord seal on 1973A has the page of the A-Death of the outboard seal on 1973A has the page of the A-Death of the outboard seal elak on P-733A. And the pump was pixel datan place, the outboard seal leak on P-73AA and stapped, P-733A, was placed on A-PS (Automatic Pump Start) stand-by NO was written, call was placed on A-PS (Automatic Pump Start) stand-by NO was written, call was placed on A-PS (Automatic Pump Start) stand-by NO was written, call was placed on A-PS (Automatic Pump Start) stand-by NO was written, call was placed on A-PS (Automatic Pump Start) stand-day to lock at. On 6723/11 Operations. Maintenance and Mil rain in P-733A and day to lock at. On 6723/11 Operations. Maintenance and Mil rain in P-733A and day to lock at. On 6723/11 Operations. Maintenance and Mil rain in P-733A and day to lock at. On 6723/11 Operations. Maintenance and Mil rain in P-733A and day to lock at. On 6723/11 Operations. Maintenance and Mil rain in P-733A and day to lock at. On 6723/11 Operations. Maintenance and Mil rain in P-733A and day to lock at. On 6723/11 Operations. Maintenance and Mil rain in P-733A and day to lock at P-733A and day of the day of the seal day to lock at P-733A and day of the seal day to lock at P-733A and day of the seal day to lock at P-733A and day of the seal day of	During a test to mary the sour water finas 200 and 201 logalher to get ready for a upcoming shuldown, the vaive used to between the line became stuck in the open position.	Electricial group was doing a planed shutdown to service a switch gear on tronsfor at 17 pump seletion white JHT feed was being reuted to 1:1518 which was a tow pump out. When the power was shut of, some of the tank gauging systems were tost.	Employee was not sent his job offer in a firmely meanner. It took elimost two works for the ampliques to receive his written jobs offer after his written distributed been extended. This is due to the delay of the Corporate Recruiting group as well as its specific Corporate Recruiter not reading the desk meant and understanding that the written offer would mad eutomatically be sen by the coruling system but that these was a work around and he would need to measuring system but his these was a work around and he would need to measuring system to written offer.	Mahainanaco On Cali was asked to boate mechanics to remove incubilizon on R-200. Confract company was celled and the numbers provided when celled went to volcemal after no answer. There was no response from the contractor safter apps. 2 hours of calling and volcemalis being left. The Contract company recently changed sent/de providers and the boatbon of the annapors home did not some period allow complete cellular sent/ce. As a result of the Incident ha managor hode of the Contract wo complete cellular sent/ce. As a result of the Incident ha managor baded two contacts to their call out list and also included at home phone numbers (and lines) of this real out responders to ensure contact.	
Operationel Process/Procedures	NL-Lessons Learned	NL-Business Process - Business Process	Fire/Explosion	NL-Business Process • Business Process	Business Process	NL-Business Process - Business Interruption	NL-Lossons Loamod	NL- Equipment/Property Damage - Equipment Demage
(1) Failed Lifforque lube access door opened up	(1) Bad temperaturs Indicator coused 2 out of 3 voating shutdown of compressor		(1) Valve tell open during isotelion of the pump	50.3	(1) Communication during job preparation needs traprovement	-	(1) Phone calls were not received due to new celtular service failure	

	16791	16791	18791	16761	16704	16624
	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA- Refinery	Richmond, CA CA CRetituery	Richmond, CA - Refinery	Richmond, Rofinery
	6/27/2011 8:20:00 PM	5/27/2011 8:20:00 PM	6/27/2011 8:20:00 PM	9/27/2011 2:00:00 PM	6/27/2011 7:15:00 AM	, 5/24/2011 7:55:00 PM
	Closed	Closed	Closed	Closed	Closed	Chosed
	Loss	Loss		Loss	Logs Near	
	Vacuum fruck driver sprayed by recovered oil	Vacuum truck driver sprayed by recovered of	Vacuum truck driver sprayed by recovered eil	Operator received burn to its neck and shoulder when hat condensate rained down on him while attempting to warming up TP-124 for hot alignment.	Discomfort in lest forearm	GHT rouled off test
Green Card. I needed a drink of water and there was no cups available in the GMG offices. I was told that the cups are locked up and you have to ask for	Vacuum truck driver sprayed by recovered oil white attempting to hook up officed hose connection. An air switch located next to the cambock connection point on the truck was bumped open while in the process of hooking up the 4" pump of hose, Approx. less than 1 harrel of recovered oil spitled to grade which was contained with despers. Plant protection was notified and exhausted of these condition. Driver refused treatment from Chevron EMTs. Vegita supervisor was notified and exhibit approx. Afformatives later with safety person and indicated they would be sending driver to see their doctor.	Vacuum truck driver sprayed by recovered oil white sttempling to hook up offload hase connection. An air switch tocaled next to the camback connection point on the truck was bumped open write in the process of hooking up the 4" pump off hose. Approx. leas than 1 barrel of recovered oil spitled to grade which was confined with depense. Plent profescion was notified and evaluated which was confined with depense. Plent profescion was notified and evaluated trivers condition. Driver refused to the transfer of from Chevron EMTs. Vegila supervisor was notified and exciling a driver to see their doctor.	Vacuum truck driver sprayed by recovered oil while attempting to hook up offload hase connection. An air swiich localed next to the caminock connection point on the truck was bumped open while in the process of hooking up the 4" pump of hose. Approx. less than 1 barrel of recovered oil spitiled to grade which was consined with depense. Plant protection was notified and evaluated drivers condition. Driver refused the treatment from Chevron ENT's, Verdia supervisor was notified and condition and indicated they would be sending driver to see their doctor.	Operator received burn to his neck and ehouder when hot condensate reined down on him while attempting to warm up TP-124 for hot afgrament.	EE reported discontiont in ten loceem to Supervisor and seld they were going to go to the Clinic. EE was sidvised to well for the Supervisor. EE seld that they felt that they were experiencing a non work related muscle strain of some sort. EE was then transported to the Clinic.	GHT H/O nolleed sulfur analyzer reading high to check if it want bad FCC was called to see it any plant moves were made they reported that they were experiencing high sulfur numbers also it was mentioned that TKC had started a Module on days FCC was making moves to help with High sulfur but at low feed it could only do so much
	NL-injury/likess - Contractor injury	Environmental:	irjurj/Maess	irj:vy/liness	NL-Injury/Iliness - Employee kijury	Business Process
	(1) SOS: Design & Engineering; Handie toe close to camilock fittings. (2) SOS: Training & Procedures: Loss yeczuum Pressure. Vacuum Punip was not on: Thought there was enough recount in the loading. Short Distance from Loading site to diffueding site. (3) Slober Issues: Training & Procedures: 2' cam-lock cap was not removed under full yeczum fist to enqure their the discharge time is empty. (4) Sidebar Issue: Training & Procedures: Driver was not weeling proper personal protective clothing for discharging the yeczum functo.	(1) SOS: Design' & Engineering; Handlo too close to cambook fittings. (2) SOS: Training & Procedures: Loss Vacuum Prassure: Vacuum Pump was not on. Thought there was enough vacuum left from the loading. Short Distance from Loading site to di-floading site., (3) Slobbar Issues: Training & Procedures: 2' cami-loak cap was not removed under fulf vacuum first to ensure that the discharge line is empty., (4) Sidabar Issues: Training & Procedures: Driver was not weeting proper personal protective ciching for discharging the vacuum funck.	(1) SOS: Design & Engineering: Handle too close to camlock fittings. (2) SOS: Training & Procedures: Loss Vaccoum Prassuro. Vaccoum Prans was not on. Thought these was enough vaccoum set from the loading. Short Distance from Loading site to enfloating site. (3) Statebert issues: Training & Procedures: 2' cam-tock cap was not removed under full vaccoum first in ensure that the discharge line is empty. (4) Stobber issues: Training & Procedures: Driver was not	(1) Why did operator get burned by condensale? • Because condensale came out of the furbine case want and contacted operator Why did condensate come out of the vent and contacted operator Why did condensate come out of the vent and contact operator? • Condensate can end up exiting vents for a number of potential meanes (wet steam, inadequate top system, inability to drain low points, condensing occurring in the vent stacks, etc.), Condensate contacted operator because the steam exhaust block valve that the operator was manipulating is directly under the vent? • After 2008 B&S condensate burn incident, this system was identified as an at 11sk area that needed solutions put in place, is 7) Why was solution newer put in place to mitigate exposure? • Solution was cover put in place to mitigate exposure? • Solution was cover put in place to mitigate exposure? • Solution was cover put in place to mitigate exposure? • Solution was covered out in investigation detabase as complete before all components of solution were implemented. No subsequent by seem was put in place to ensure solutions were owned and being carried to completion completion occurring the place to completion occurring the place to completing carried to completion.		(1) \$00\$: Training and Procedures; Communication GHT Gasolina reprocessed at a cast of <58K. GHT Operations were not aware of change in FCCH feed condition. Were not alrefted by the FCC that suffur was higher than normal, (2) \$05: Training and Procedures: Communication: GHT Gasoline reprocessed at a cost of <58K. Off Spec Gasoline was produced at the GHT. Were not disceptly alrefted by RS. 12 7:45 conf call that lead condition could change, (3) \$05: Training and Procedures: Communication: GHT Gasoline reprocessed at a cost of <58K. Off Spec Gasoline was produced at the GHT. GHT Operations were not aware of change in FCCH feed condition. Were not directly alrefted of possible feed condition change via 21 day plan., (4) \$100 ber 1344s. Training and Procedures: (Communications): The puldance for GHT product couling for off test situations is unclear and needs review and modification to minimize impact on gasoline benefits and/or and/or passible benefits and/or

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	17236	17236	17211	17189	17176	17173	17154	17152	17149	17026	16986	16979	16914	16856
	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA • Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmend, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond CA - Refinery
	7/1/2011 19:00:00 AM	7/1/2011 10:00:00 AM	0/29/2011 12:00:00 PM	6/29/2011 6:46:00 PM	6/14/2011 2:00:00 PM	6/30/2011 2:15:00 PM	6/27/2011 10:00:00 AM	6/30/2011 10:30:00 AM	6/28/2011 6/30:00 AM	8/6/2011 9:00:00 AM	5/6/2011 2:00:00 PM	5/28/2011 2:20:00 PM	5/20/2011 9:00:00 PM	1:00:00 PM
	Closed	Closed	Closed	Ciosed	Closed	Closad	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
	Near	Near	Near	Near	Rear	C See	Near Loss	Near	Near Loss	Hear	Rear Loss	Near Loss	Near Loss	Near
	Opening waste oil storage crum in back of D & R lab, crum burged oil out which shot about 2 feel into the sir	Opening waste oil storage drum in back of D & R lab, drum burped oil out which shot about 2 feel into the air	Green Card-Hand Real in	Operator noticed small HG lask on channelished of E-	Backing Company vehicle out, did not see vehicle coming up behird van	P-152A cooling water pump suction plying leak.	Green Card Replace fire monitor deck. Location: Behind separator on Main Street.	Backhoe worlding on an incline stalled out due to tost of fuel.	Green Card, Walkway behind Firehouse rolled, Location: New Firehouse	Rebooted Server outside of Maint Window	Clientes were being diconnected from User1 during our normal working day	Third Party Outside Heufer not correctly fied in with Safety Harness white operating Maniff	FCC Lost Control of C670 DTM CRos B&S Line Wash Transfer to 1-397 as Cause	Green Card, No cups available for chinking water, Location: GMG
	Went to dispose of sampled oils into waste oil drum at the back of the D.& R. lab. When I opened the velve to the drum to pour the oil into the drum, oil shot out of the drum up into the aff approximately? 2 feet.	Went to dispose of sampled ofis hito waste oil drum at the back of the D.S. R lab. When to spened the valve to the drum to pour the oil into the drum, oil shot out of the drum up into the air approximately 2 feet.	Green Card-₁ leaned on a hand rail and simosi fell onto the pipe trenches because the 4 X 4 support was weak.	During first iounds, unit operator noticed liquid/vapor spiting from the bottom of the channetistical of E-355681 He informed the Head operator, who in turn informed the STL. The steam ring was placed in surface to deter ignition. OFD was informed to assess fre righting possabilities. Exchanger was monitored for the peak several hours. CFD checked for LEL and EZ. None delected AI - 23:00 during a routine check of theosechanger it was noted that the bek had stopped. Maittenance and DED checked the exchanger on the following dayshin and steam was shut off to the steam ring.	Contractor was backing out of parking space as arother vehicle was approaching. Contractor did not see the vehicle behind him and continued to back out of spat. Fortunately, approaching vehicle stopped early to avoid possible low speed collision.	While hot aligning P-162A coeling water pump the euclien piping spool starbod leaking. The pump was out to service the coupling. The spool falled due to external corrosion.	Green Card. Replace the fire monitor deck located behind separator on Main St. If there is a file, cannot use the fire monitor, Location: EOD, behind separator on Main St.	A haddhay was working on an incline with the bucket facing downwasts. The angine stalled due to lotes of their and could not move. These wasn't much fuel in the tank and the sharp downards engle caused the fuel pump to be starved.	Green Card Walkway's behind the naw Firehouse is rotted.	Restarted RicAd Inspidinz outside of normal culage window. Installed new Legato client on RicAd Inspidinz Worked with PJ analyst to schedule culage.	During our regular working day, some users were being doonnected from their 'P' drives and if the client rebooled their PC, then the 'O' drive would get disconnected also.		Prior to transfering T-1899 to T-3186 Blanding and Shipping Crude washed the 12 PV to T-397. This is a common transfer that happens shrost delig. The line wash occurs on the 1184,5 which shares a common fill hasdor on T-307 with the 1414 N acess 16 (cm FCC ARY, Cn his occasion due to unknown process concilions at FCC/ARY C670 level began to rise uncontrollably.	one, but thee was no supervisor. OSHA law requires the empbyer to supply qual of wales per hour per employee, and cups. Are we going to have to carry our own cups around? Location: GMG
	NL-Environmentet - Spi#	NL-Injury/Illnass - Contrader Injury	NL- Equipment/Property Damage - General Lebility	NL-Environmental - Operational Leak	NL-Transportetion - Contrador	NL- Equipment/Preperty Damage - Equipment Damage	NL-Lessons Learned	NL-Business Process - Business Interruption	NL-injury/iliness - Employee injury	NL-Business Process - Business Interruption	NL-Business Process - Abnormal Supply Occurrence	NL-injury/iliness - Contractor injury	NL-Operational Frecose/Procedures - Flant Run OutSlow Down	NL-Lessons Learned
(1) 1) PCO grabbed wrong switch on panel. 2) PCO did not perform i.PSA before lask. PCO did not change light built out or recognize he was on the wrong chapper switch. (2) SOS; Dasign & Engineering. Switches are too doze logatifier, poorly labeled and ii., chitical switches have no covers, etc. poorly labeled and iii., chitical switches have no covers, etc. (3) -tiliobar issue. Design & Engineering : Evacuation natem switches are not at a separate location from critical switches on starm panels., (4) -Stdebar Issue. Transing & Procedures:	(1) The drum was under pressure; there was liquid in the funnal on top of the closed velve., (2) The liquid in the funnal should have been dramed out.	(1) The drum was under pressure; there was liquid in the furnel on lop of the closed valve., (2) The liquid in the furnel should have been distinct only.		(1) SOS: Mainlenance & Inspections: E-3560B LEAK AT CHANNEL HEAD, Feed Temperature/pressore swings causes thermal cycling, Gasket Relexation (Low gasket stress develops over time). Not enough tensioning/atress on boluflange.								(1) Normal practice, user just neglected to the off to unit. Was wearing the safety harness, was in a huny to drop off his foad.	(1) Dasign & Engineering: Pump was unable to dalver enough pump descharge pressure, (2) Trailing & Propodures: Ne communication between B&S and Pay eleval puming at higher rates at Poly Frant, (3) Dasign & Engineering: Poorly designed pump powid not pump aged acid last enough.	

						7/8/2011	Richmond, 7/8/2011	
	NL-Transportation - Contractor	Green Card - Work van stopped in the middle of streat, elt workers jumped out almost get hit by my Chevron truck. Dangsrous action on the part of the driver to stop and is; people out without getting of the streat.	Green Card - Van Stoppsd In Middle of Street	Near Less	Closed	7/5/2011 4:28:00 PM	Richmond, CA - Refinery	17584
(1) Fiberglass line failed due to old age. It is at least 30 years old - probably closer to 50.	Equipment/Property Damage	Sanitary sewer line leak off Megawatt Ave. Localed bokwoon Oogen & RP plant. Leak is near the line support hanger in the overhead pipeway.	Sanitary Sewer Une Joak off Magawatt Ave Between Cogen & RO plant	Loss	Closed	7/7/2011 11:00:00 AM	Richmond, CA - Refinery	17532
(1) Funding to perform AUT inspection was not available and justification for funding was not strong enough to obtain funding or for entering the vessel at all.	NL-Business Process - Business Interruption	Automated UT inspection in March of 2011 (dentified taminations and planer defects in the bool of V-1100 which triggered a Fliness Fox Service Evaluation.	V-1100 Fitness For Service Evaluation	Near	Closed	7/6/2011 12.00:00 AM	Richmond, CA - Refinery	17508
(1) The root cause will be identified after the tank is shuldown and inspected. It is suspected that either the actuel location of the rootlags or the type of hose may not be suitable for the service.	EquipmentProperty Damage	While doing roof inspections Shuldown Safely Operator noticed what appeared to be oil on the Roof of T-3186.	Roof Drain Failure on T-	Loss	Closed	7/5/2011 2:30:00 PM	Richmond, CA - Refinery	17397
	NL-Injury/linese - Contractor injury	Green card a light set from the catwark at the 1400 deck (SW) at RLOP 14 Plant onto the ground. The handrali was lightly bumped approximately 3' from the light pole.	Green card - light fell from cetwalk	Noar Loss	Ciosed	6/20/2011 12:00:00 AM	Richmond, CA - Refinery	17382
	NL-InjuryIlliness - Employee injury	Green card a light left from the calwast at the 1400 deck (SW) at RLOP 14. Plant noto the ground. The handrali was lightly bumped approximately 3' from the light pole.	Green card - light fell from catweik	E E E	Clased	6/20/2011 12:00:00 AM	Richmond, CA - Refinery	17392
	NL-injuryiliness - Employee injury	Geen card - spoiled an employee with a green sicker on his hard hat walking through the 4 crude unit by himself and he should have been accompanied by someone else.	Green card - spotted an smployee with a green sticker on his hard hat walking through the 4 crude unit by himself.	Near Pess	Closed	6/22/2011 1:30:00 PM	Richmond, CA - Refinery	17381
	NL-injury/lliness - Contractor injury	Green card - spoiled an employee with a green sticker on his hard hat walking through the 4 crude unit by himsel and he should have been accompanied by someone else.	Green card - spotted an smployes with a green sticker on his hard hat walking through the 4 crude unit by himself.	None None	Closed	6/22/2011 1:30:00 PM	Richmond, CA - Refinery	17381
	NL-Injury/liness - Employee hjury	While exiting the traiter st242 Center St. EE tripped on the all weather mat end fell. Asked the EE if they were ok, they said yes and elected to go back to work.	Trip and fall	Near Loss	Closed	7/5/2011 8:17:00 AM	Richmond, CA - Refinery	17366
(1) Why was there water in the V-143-144's. There was water in the high pressure accumulators due to water carry-over from V-141. Why was there water carry-over frem V-141. There was extended to be delived indications on the 67LC1411, water interface. Why was there a bad indication on 67LC1411, water interface. Why was there a bad indication on 67LC141 due to the steam trading on the bridle indication on 67LC141 due to the steam trading on the bridle was cold and bottom log on level displaces was stanted upshill. Why was the steam trading out, Steam Trading was cold tue to steam trading out, Ste	NL-Operational Process/Procedures - Plent Run Out/Stow Down	Al approximately 4 am this morning Nightshift crew began to cut feed in the SDA plant due to an unexplained decrease in DAD yield. Further investigation Dayshift found significant emporits of water in the Solvent accomitators V-814144 (approx. 300BBLS) Operations continued to drain water from the stabilizer.	SDA feed cut	Near	Closed	7/4/2011 4:00:00 AM	Richmond, CA -	17925
(i) Free blown, (2) SOS: Maintenance & Inspections: Stop signal from Multith rippod P-404B. Blown fixe (Fill-7) triggered (sent) stop signal to Multith. Blown fixe found in circulary (instrument/junction) box. Free blow (unable to determine eause), (3) SOS: Stabbar fissue, Design & Engineering (Design of Equipment): "Altempts to restart P-4040A, the back-up pump, faited. Lights on the EBV switch were out "EBV was open in the field, yellindication in control mooral showed it to be closed: "P-4040A driver atterm his lateth would not work, resel takeh button would not entered the control mooral processing the control of the control	EquipmentProperty	At 16.43 p-40.40 tipped off line. Operations responded and were unable to re- sider it. Operations then attempted to start P-4040b, Ops recognized that the lights on the suction EBV switch were out and the EBV was open but indication on the board was closed. The steam miet has a reset letch with a button to push to engage it. The button would not set, pos meanually held the letch open. The FC-41 chop to the Rats and the min flow on P-4040's to protect the unit and feed pump. The pump restarted with no issues. After troublehooting there was no power to the parel, and remote shuddown 4072041 lights were out. Maintenance was called out and after extensive troubles shooting desprosed FUT has blown on the finer posting reity press that blown, Alafricances replaced it, power to the parel was restored. The EBY on the Honsywell showed open, the listic was then holding normally without assistance. Ops then switched pumps to the F-4040 electric pump.	P-4040/A tripped due to blown fuse on inner posting roley penet.	Loss	Closed	7/3/2011 7/43:00	Richmend, CA - Refinery	17310
Operations who were out in the plant to help light the furnace had to go searching for forches. The 4 Cet furth off not work, a few other forches located in nearby plants did not work either, except far one (used for the relighting of the furnace). Only one wrench for the deblinding of the burners was found. Although this did not severely impact the start up of the plant, it could have (normally several wrenches can be found near the furnaces but overfime thas are removed and not returned).	Equipment#rcperty	At 1900, on 771/2011, white lesting the Penhex plant evecuation alarm per the Reutine duties, the Honeywell PCO Accidently operated the 4 cat fuel gas shuldown switch and chooped the fires at 4Cat furnaces.	4Rhen furnace emergency shuddown switch accidently switched	Loss	Closed	7/1/2011 7:00:00 PM	Richmond, CA · Refinery	17259

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	17773	17773	17730	17710	17699	17697	17669	17651	17630	17621
	Richmond CA - Refinery	Richmond CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond CA - Refinery	Richmend, CA - 17697 Referery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	17621 Refinery
	7/12/2011 12:00:00 AM	7/12/2011 12.00:00 AM	7/11/2011 10:20:00 AM	7/11/2011 12:00:00 AM	7/10/2011 12:01:00 AM	7/10/2011 3:30:00 AM	7/11/2011 2:00:00 AM	6/29/2015 12,41:00 PM	7/9/2011 1:23:00 PM	11:40:00 AM
	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
	Near Loss	Near	Loss	Loss	Loss	Nuar Loss	Near Loss	Loss	Loss	Near Loss
	Contractor Observed Purlying Forklift in the Tank Field	Contractor Observed Driving Forkill in the Tank Field	Contract employee hit gaurd rait with restal truck	Their of walding cable	Non-compliance with vapor aballement carbon carrieter changeout	Green Card. Tanks do not have good grounding locations. Location: B&S	Increase in SISO Relief	TP-310 A-Train HPBFW pump tripped of fine	F-510 shut down during	C-820 to become unstable.
Trop INVESTIGATION: FINAL DESCRIPTION IS NA LINK TO THE LEFT, Initial description: white in proofing the open and of R-1416K after equipment was chemical eleaned and neutralized without breaking the plane of the equipment IEE and others noticed a not normal small which resulted a neadactor and troat lindlen, ANY F soliter & K contactor has been chemically neutralized in preparation for project work knide V-1410F. Entry blinds had been installed an amenay so opened to establish equipment vanishen on Monday TVI. Upon initial inspection of equipment on Tuesday TVI. Administration deleted an unsual a strong odor coming from the opened proposed. Maniferance requested open Mayni and Srefay dept. rep to sesses the condition of the autipment of colorings. A decision was quickly made to include an additional chamical which was generating the odors, procedure to eliminate the residual chamical which was generating the odors.	Contractor was observed using a fortiff up mad to 878 TK on Potacilis Hill Company employee informed his occurrence and has were a stord to leave the erre. After discussion with contractor it was discovered that he was not aware that this area was considered put of the fank field and of limits pota their was no sign present.		Contract employee was traveling north on Petrollio St. and made a right turn across narrow bridge into DAC control room parking lot. In the process of furning, the right rear wheel was cought the geur drait resulting in demage to nght rear panel and rear bumper of rental truck.	LSM contractors discovered there welding leads that are used for the rock field had been shown. There was behaveen 1800 and 1900 (set of welding cables chained locked up, in the weld bay.	The inspection of cestion waper shalamani on fise, lask related to R-1410 in the Atty plant tailed to get the proper changing of the cerbno-canister, based on information the technisian recorded. Permit condition made as follows: Must remove Carbon at it reading a point. B (between 1st and 2nd drum) is >10% of point A (niet reading) CR >1000 ppm and move earther fis into position; #1. A restrict is then piece thin position #2. It restring is all point C is >100 ppm than the position \$1.00 ppm and move earther fis into position; #1. A plant to the project of the position \$1.00 ppm and move earther fis into position \$2.00 ppm and move earther fis into position \$2.00 ppm and move earther fis into position \$2.00 ppm and ppm and \$2.00 ppm	Green Card. While gauging multiple tanks, observed that most or all lanks do not have good grounding locations. Paint and dirtyhusty hingas or boils commonly block line electrical path in the best grounding locations available on most terks. Location: B&S	OWS2 readwod an alarm when the audion pressure increases at FGR compressor K-1070 V-135 overhead pressure control system had malfurcion and allowed make-up Net Gas to flow streight through into the relief system. Once OWS1 placed the ownnesd pressure controller PV1345 to relief on manual with set point at 0% (the valve leaks by) and Make-up controller PV1346, in auto with as point at 15 PSIG the uncontrolled flow to relief was possived. YH 337066		2 operators were performing a FSSD Quick Test at F51q. One began closing valve on fuel gas line downstream of FSC in preparation to open the typess. When pressure started to drop he notified the other who then began to open bypass. After a few seconds continued to open bypass and suddenty got flow, time pressure pagged 60 psi gauge and bypass was quickly closed; there two too ligit as it in Atel gas chopped. Operators then isolated all fuel gas valves and followed residin process for while F51q. The operators had the FSSD Quick Test checklist in hand and were using it.	Elevated NH3 % in feed cause column C-820 pressure to bounce (High D/P and followed by sudden pressure drop), possible cause off test product.
	NL-injury/iliness - Contractor injury	NL- Equipment/Property Damage - Ganeral Lisbility	Transportation	Security	Regulatory Compliance	Nt-Lossons Losmod	NL-Operational Process/Procedures - Gafety Systome	Equipment/Property Damage	NL-Operational ProcesseProceduras Plant Run Out/Slow	NL-Quality - Product Quality (Int)
(1) SOS: Design & Engineering: Exposed to Abnormal Small. Rodings1/A. Used for Cleaning of V-14 ID. Listed as one of the chemicals to be used for cleaning of vessel in the contractors' contract procedure. Approved for Use	(1) Failure to (cllow existing Chevron Fosklift Policy,	(1) Failtze to follow existing Chevron Fatchifi Policy.	[1) EE tumed too sharp and contacted the guard rail	(1) lhaft unknown	(1) 5 Why; 1. Why did AGIG/Haz/Wasio miss cerbon change- our? Because ACIG technicien taid the liquid specialist the readings were fine. 2. Why did the ACIG technician to tall the liquid specialist that the VCC reading when a pood? Because the westend technician was told during a turnover that the 10% of hitst reading was all that was required and did not read the paragraph on data sheet stating the 1000 ppm breakforcupt would need a change-out of canon.		(1) PT1346 (V-135 overhead PT to relief) failed, causing	(1) Wasp holes not dilled in Trico ollers, causing overfill of besting housing, causing oil hings to gut sprinting, causing loss of lubrication. • An guideline on modifying Trico ollers to add weep hole to provent overfilling (machinals have been traited, though).	(1) F-310 SAD during FSSD Quick Test WhyHigh Pressure in fuel gas header Why-Operators were cleating the block valve to the FQ and operang the bypass valve to perform the Quick Test, Bypass valve was operand to regitly! And balanced with cleating the FQ block valve, (the bypass valve takes very little input for substancial change) Why Operators did not recognize how "Guichy" the valve adjustment was Why Not familiar with test, F-510 bypass valve takes very little input once off the seat to make a substancial change in flowingnessure. Why This tesk only rotates around to different crews pencolocally.	

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	17975	17975	17971	17971	17892	17807	17804
	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - 17971 Refinery	Richmond, CA - Refinery	Richmond, CA - 17892 Rafinery	Richmond, CA - Refinery	Richmond, CA - 17804 Refinery
	7/12/2011 3:00:00	7/12/2011 3:00:00 PM	7/14/2011 10:30:00 AM	7/14/2011 10:30:00 AM	7/12/2011 3:40:00 PM	7/11/2011 8/20:00 AM	7/12/2011 1.00.00 PM
	Closed	Closed	Closed	Closed	Closed	Closed	Closed
	Loss	Coss	Loss	Loss	Loss	Logs.	Losse
	Foul prerwhelming odor in Foul prerwhelming odor in Reductor for seller & K contactor) following chemical cleaning	Foul overwhelming oddr in Aley plant, (if settler & K contactor) following chemical deaning	C// lines to C1190 sample draw knocked / damaged during staging	CW lines to C1190 sample draw knocked / damaged during staging	Officer (ripped over a remet) plate and weter to see causing body injury.	Centra Com Radio Dispatch in Firehouse intermittent outage	Exposure to furnes that kitated EC throat and gave headache
TOP INVESTIGATION IN LI 17804> Alky F settler & K contactor had been chemically neutralized in preparation for project work inside V-140F. Entry blinds had been installed and manuarys opened to establish equipment ventilation on Monday 7/11. Upon initial inspection of squipment on Tuesday 1/12, Maintenance edected an unusual & strong odor coming from the opened equipment and interference related to the Monday 1/12, Maintenance edected an unusual & strong odor coming from the opened equipment Maintenance requested Opt Mgmt and Safety dept. For pict assess the condition of the equipment for cleaniness. A decision was quickly made to	TOP INVESTIGATION IN IL 178045 Ally F salter & K conhador had been chancilly restricted in preparation for project work incide V-44016 Entry blinds had been installed and manueys opened to establish exploment verillation on Monday 7/11. Upon hitlal inspection of equipment on Tuesday 7/12, Mainterance desected an unusual & strong odor coming from the opened quipment Maintenance requested to be significant of odor coming from the opened quipment Maintenance requested to be significant on the property of the season in condition of the exploremant for cleaningers. A decision was quickly made to does the equipment and initiate an additional Deta Tech charical circuisten procedure to eliminate the residual charmical which was agenerating the clore. The associated losses to this incident are; Chamical used by Deta Tech was a different acid inhibitor that was substituted for what is typically used, the different acid inhibitor that was substituted for what is typically used, the charmical used was not clearly outlined in the procedure, the cost for maintenance revent/delays associated with the second chemical exposure resulted in acute illness to one individual who was talar cleared to return to work.	TOP INVESTIGATION IN LI 178042 Ally F satisfa & K contactor had been characily reductated in preparation for project work inside V-14 UBF Entry blinds had been installed and manuays gened to establish equipment ventilation on Monday 7741. Upon Initial inspection of equipment on Tuesday 712, Mainseanca delected an unusual & strong odor coming from the operand equipment Manihemetor requested Ops Migrat and Satisfy opp. rep to assess the condition of the equipment and initiale an additional Delta fetch chemical circulation procedure to eliminate the restoral chemical which was generating the odors. The associated forese to this incident are, Chemical used by Delta Tech was a different acid inhibitor that was substituted for what is tylerally used, the continuation of chemical used the acid of the continuation of chemical used draws not clearly cultined in this procedure, the cost for matherance event-foliation sessociated with the second chemical experture resulted in acute illness to one incided which was later cleaned to return to workled in acute illness to one incided which was later cleaned to return to workled in acute illness to one incided who was later cleaned to return to workled in acute illness to one incided who was later cleaned to return to workled in acute illness to one incided who was later cleaned to return to workled in acute illness to one incided who was later cleaned to return to workled in acute illness to one incided who was later cleaned to return to work.	Outing staying for upcoming StD near C1160 the fines of CW1 to the C1190 sample draw were knocked and subsiquently demaged. This caused a leak in the suppy fine and the return line was also demaged. The CW was blocked in and the lines were desired. However, operations is now unable to draw the C1190 sample as the cooler is needed for sample draw. The product is approx. 170 degrees Færerheit.	r .	Officer tripped over a trench plate and water hose which caused bodily injury (scraped knaes, shin, elbow bump on head). Officer was authorized to relum to duly by Doctor at leafnery clinic. However, Officer was replaced el post and allowed to go home and recupencia. Doctor wards to see him when he relums at regularly scheduled time Thursday (7/14) before he goes to his post.	The Dispercher console was blanking out momentarily	different acid inhibitor that was substituted for what is typically used, the chanical used was not clearly cutlined in the procedure, the cost for maintenance reworkdelays associated with the second chem clear circulation to address the odots was not planned or budgeted and personnel exposure resulted in acute illness to one includual who was later deered to return to work.
	Quelly	Business Process	Equipment/Property Damage	NL- Equipment-Property Damage - Equipment	ใญบารกิเกษรร	NL-Operational Process/Procedures Safety Systems	injury/liness
	~		(1) stagers bumpad water fine	(1) stagers bumped water 折ne	(1) Palet 1. Why did the Officer thip over the tench pieto? a. The edge of the plate was higher than grade. 2. Why was the plate higher than grade and rot reported? a. The plate was warped or the mating surface was uneven. b. In the past did not follow procedure or exceptable practices and no incident occurred. (2) The Officer tripped and fell stepped on well garden hose, slipped and hipped on the uneven tench plate. Hose 1. Why did the Officer walk on the hose? a. The Officer walked on the hose because it wasn't properly stored. 2. Why wasn't the hose properly stored? a. In the past did not follow procedure of acceptable practices and no incident occurred.		procurement)., (2) SOS: Training & Procedures: Substitute Chemical Rodina31A was not discussed during HSE. Not well communicated., (3) Sidebar Design & Engineering (Chemical Selection and Substitution). Armothb was unavailable and there no back up chemical (ceds inhibitor) in its place that approved by the refinery currently

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	18378	18371	18314	18308	18271	18271	18242	18235	18233	18215	18165	17975
Richmond,	Richmond, CA - Refinery	Richmend, CA - 18371 Refinery	Richmord, CA •	Richmond, CA - Refinery	Richmond, CA - Refinory	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery
772272011	7/21/2011 10:00.00 AM	7/21/2011 10:00:00 AM	7/18/2011 12:00:00 AM	7/20/2011 12:00:00 AM	7/20/20:1 12:00:00 AM	7/20/2011 12:00:00 AM	7/19/2011 1:00:00 PM	12/31/2010 11:59:00 PM	3/31/2011 11:59:00 PM	7/15/2011 12:00:00 AM	7/17/2011 3:58:00 AM	7/12/2011 3:00:00 PM
******	Closed	Closed	Closed	Closed	Clased	Chaed	Closed	Closed	Clased	Clased	Closed	Closed
	Near	Near Loss	CSS	L OS 3	L OSS	Naar Loss	Near Loss	Loss	Lass	L Near	Near Loss	i os
	Green Card, Hand rait broke after contract painter feaned on it. Location; Long Wharf	Contractor Employes struck on upper bridge of nose	Large amount of ok Impacting 13 separator and the bio knlet.	Lost LOTO key	Company car found with trunk open	Company car found with frunk open	Two Abandoned lines dripped less than a gallon of hyrocarbon during a not day	VOC inspections were not conducted on new flow mater components on the Wharf Vapor Recovery line at the ERD.	Regulatory required lest of FCC V-65 O2 enalyzer was not completed for 1st 10,2011	Unable to install TP-310A due to tack of material	Almost exceeded V-476 H2S 24 Hr Avg	Foul overwhelming odor in Alley plant (Freelier & K control (client) chemical cleaning chemical cleaning
Plant Op noticed jube oil flow from P1601 gearbox showed no flow when he	Green Card, Hand rail gave way after contractor painter leaned against hand rail and almost fell in the water, Localton: Long Wharf Bent 104	While contract employee was blocking and raising pipe hydriic jack kicked out causing the jack to come in centact with workers nose	A large amount of oil passed through 13 separator and entered the bloreactor intel on the weekend of viety 15. Oil was visibly described as ways, After the first 4 days, the oil changed in appearance/cock, at this time, EDO Visually identified the 50° line from Hydro as the contributing source to the oil. Contributingly, EDO operations made algorithms that gas to 13 separator (reducing its especial capacity in preparation for planned maintenance) on the Moratey after the oil begen showing up. The oil confirmed to rowwindin 13 separator or plants as week and a half before subsiding to normal oil levels that 13 separator could handle.	Opened LOTO box to remove lock and the key was not inside.	Company car found with funk open - when artiving at work. Car was tocated in parting jot on BSS site of cafebria. Car was while Chevy - 4ACH152. Not known if anything was removed from funk.	Company car found with trusk open - when eriving at work. Car was hoaled in pathing lot on B&S side of caterate. Car was while Chevy - 4ACH152. Not known if anything was removed from trunk.	Two abandoned lines dripped less then a gallon of hydrocarbon during the heat of the day	Regulatory (equired VOC haspaclions were not conducted on new flow mater components on the Whitef Vapor Recovery time at the ERD. The components were placed in service on December 28, 2010 but the Alf-Compliance inspection Group (ACIG) was never notified through the MOC process te additioned to their VOC inspection displaces and as a result recipied quarterly VOC inspections were not conducted for the 402010, 102011, and 202011.	A regulatory required Relative Accuracy Test Audit (RATA) for the FCC V-85 oxygen analyzer were not completed during the 1st quartor of 2011, resulting or a Tills V deviation. The originally scheduled lest was delayed whice due to operational seates, and due to a communicational broadcown with the test confidence, a third test was rever scheduled.	Unable to install TP-310A as scheduled due to lack of required material, IE: complete coupling assembly.	Following an upset condition of the #3 H2S plant starting on 7/16 st 02:30am. V-475 Fusi Gas K/O drum saw levels of H2S as high as 1/25,1 pcms. The H2S 24 hour average has a mackroun value of 60 ppme and the highest that was desicated was 49.3 at 03:58 am on 7/17.	close the equipment and initiate an additional Delta Tech chemical circulation procedure to eliminate the residual chemical which was generaling the ocors. The associated loses to this incident raw. Chemical used by Delta Tech was a different acid inhibitor that was substituted for what is typically used, the chemical used was not clearly outlined in the procedure, the cost for mantiements rework/delay's associated with the second chemical acid chemical was not clearly outlined in the procedure, the cost for mantiement rework/delay's associated with the second chemical except control of the control
	NL-injury/iliness - Contractor Injury	NL-hjuy/illness - Centractor injury	NL-Environmental - Operational Leak	NL-Operational Pracess/Procedures - Safety Systems	ML-Transportation - Company	AL-Security - Property Loss or Theft - Physical Property	NL- EquipmenVPreperty Damage - Equipment Damage	Regulatory Compliance	Regulatory Compliance	NL-Lessons Learned	NL-Regulatory Compliance - Permit Exceedance	Operational Process/Procedures
		(1) SOS:Meintenance & Inspection: Jack Used Was Too Small for the Job. Bigger Size Jack Was Unaveilable, Order Hadrit Come In. (2) SOS: Miggleton Deviages. Jack Became Unstable, No Sterve For The Pipe., (3) SOS: Pozenal Protective Factors; Jack Used Was Too Small for the Job. Thought It whold Be Safe to Use until bigger jack arrived.	(19) The initial surge of oil that made it past 13 separator into the bioraction on the weakend of 71/5/11 was found to be a final-sed base oil, either 10/5/6 or 10/6/1/6, IV was found to be a final-sed base oil, either 10/6/6 or 10/6/1/6, IV was on a 11/6/6/6 or 10/6/6/6 oil material of 10/6/6/6 oil material oil material oil sewer could be identified. Sutsequent oil material objects of 10/6/6/6/6/6/6/6/6/6/6/6/6/6/6/6/6/6/6/6					(1) Hunan error	(1) No system or procedure to assure test had been completed.	(1) Inadequate communication between head mechanic and planner. (2) Need menagement to review position vacancies to determine it dequate personnel levels are maintained to ensure successful planning, scheduling and execution.	(1) PED and Nalco had not established proper operating gludelines or maximum for arti-foam injection, (2) PED/Noperations were unswers or the postonial for fooding/foerring caused by too much return flow to C-220	

(1) ANS injection rate into T-3107 set too high 5-Why							•	
	NL-Transportation - Company	Graan Card - Truck cut corner very tight at Mill / Channel & elmost hit HealthQuest vehicle welling to make a turn on to Channel Street.	Green Card • Truck cut comer vary light at Mill / Channel & almost bit HealthQuest vehicle at Stop sign on Mill Street	Near Loss	1 Clased	. 7/27/2011 9:00:00 AM	Richmond, CA - Refinery	18755
	NL-Injury/Illness - Contractor Injury	Green Card - Truck cut comer very tight at Milf / Channel & aimost hit HealthQuest vehicle evalling to make a bum on to Channel Street.	Green Card - Truck cut comer very light at Mill / Channel & almost bit HealthQuest vehicle at Stop sign on Mill Street	Near Loss	1 Closed	7/27/201 9:00:00 AM	Richmond, CA - Refinery	18755
	NL-Transportation • Contractor	Green Card - Truck cut corner very light at Milt / Channel & aimost hit HealthQuest vehicle wallung to make a turn on to Channel Street.	Green Card - Truck cut comer very light at Mill / Channel & almost hit HealthQuest vehicle at Stop sign on Mill Street	Loss .	1 Closed	7/27/201 9:00:00 AN	Richmond CA - Refinery	18755
	NL-tessors Learned	Green Card. Leaving line building, I was concentrating on locating my vehicle so my eyes weren't on the path and I tripped over the concrete parking barrier. Location: Grecking Admin Bidg	Green Card, Tripped over the concrete parking barrier, Location; Cracking Admin Bidg	Near Loss	Closed	7/26/201 11:15:00 AM	Richmond, CA - Refinery	18724
(1) Off the Job Injury	Ain)	Employee complained of back pain due to an injury sustained at home while performing yard work. The pain, present at start of afirt, progressively worsened throughout the night to the pain there he requested Plant Protection respond and provide transport to a hospital.	Employee complaint of back pain due to an injury sustained at home while performing yard work.	Loss	t Closad	3:30:00 AM	Richmond, CA - Refinery	18689
(3) Off the Job Injury	โกโนาห์กิเกอรจ	Employee complained of back pain due to an injury sustained at home while performing yard work. The pain, present at start of shift, progressively worsened throughout the night to the point where the requested Plant Protection respond and provide transport to a hospital.	Employee complaint of back pain due to an injury sustained at home while performing yard work.	Loss	1 Closed	. 7/27/201 3:30:00 AM	Richmond, CA - Refinery	18689
	NL-Lessons Learned	Gean Card - Large cover to breaker panel in PC #6 LP 2A in RLOP 18 Plant War removed, leaving base wires exposed. Cover was laying on the ground next of it.	Green Card - Large cover to breaker panet in PC #6 LP 2A in RLOP 18 Plant war removed, leaving bare wires exposed.	Near	Closed	7/21/2011 10:30:00 AM	Richmond, CA - Refinery	18653
	NL-Business Process - Business Interruption	While switching from K-900 A to K-900 for K-900A maintenence Hydrocom pump shut down unexpectedly causting K-900A to load to fall safe 100%. This swung Rhan expect H2 to North Yerd. K-900A shutdown on a CiU error control output out or range.	K-900A to K-900 switch	Near Loss	f Closed	7/25/201 1:30:00 PM	Richmond, CA - Refinery	18642
	NL-injuryillinese - Empkyee injury	Green Card. Tripped on an air hose that lies across raised pathway into 7 Station near T-1505. Did not fail but it could have resulted this serious fail down in the station or into the T-1506 lower area. Location: BES #7 Pump Station	Green Card. Tripped on an air hose. Location: B&S #7 Pump Station	Near	t Closed	7/19/201 7:00:00 AM	Richmond, CA - Refinery	18634
	Nt-injury/Illness - Contractor injury	Green Card. Multiple large polholes, causing forkiff to become unstable while moving and litting. Location: GMG staging lot	Green Card. Multiple large potholes, Localion: GMG staging lox	Nesr	Closed	7/19/2011 6:00:00 AM	Richmond, CA - Refinery	18632
(1) Why did the Voolia vacuum truck driver injure his arkso? Ho toil with his foot eaught between a "hose and a permenent concrete block structure. Why did he have his foot caught between the hose and the concrete structure? He was not perlying close enough elicinison to his surroundings. Why was he not perlying close estendion to his surroundings? He was helping out a fellow driver, and got distracted. Why did the get distracted? It was a very busy period causing him to lose focus of his surroundings.	ักในๆ/กิหา อ รจ	Contractor tipped over a 4" petroteum hose at the 1A separator offloading area. He fell to the ground and huf his arkie. Contrator immediately called his experience and informed him of the incidient. Chevron fre was called out to the contractor. Contractor was taken to his companies medical clinic offsite.	Contractor tripped over	Loss	Closed	7/26/2011 11:00:00	Alchmond, CA - Refinery	18613
	NL-Environmentat - Operational Leek	A strong gasoline oder lead to the discovery of Gasoline under 992 menifold header system on SP Hill. Due to debits under the manifold system we have been unable to focate the source. Leak was located as conting from the 10 wharf on T-922 Header and plans for the repair are underway	Leak from unknown source	Near Loss	1 Closed	7/25/2011 12:00:00 AM	Richmond, CA - Refinery	18523
	NL-injury/ii nese - Contractor injury	Green Cent. Hand to see for workers walking from Gate 91 around CRTC drum storage facility crossing Channel St. Walking on traffice to stop so they could cross Channel St. Location. Channel St. at Toulene St.	Green Cerd. Low Visibility crossing Channel St. Location; Channel St. el Toulene St.	Loss at	1 Closed	7/19/2011 6:00:00 AM	Richmond, CA - Refinery	18515
(1) While disabling 1 of 2 Tis CGT Tripped. 'B" Ti was erralt, Ops disabled "A" Ti first and the second Ti went erralts and initiated 2 of 2 trip logic.	Business Process	Loss of Ocgen 2000 Irain due to temperature probe issues	Cogen T-2000 train trip	Loss	1 Closed	7/24/2011 10:00:00 AM	Richmond, CA - Refinery	18463
(1) Breather Cap on oil reservoir and does not allow presure to vant causing low oil flow into reservoir readily	NL-Lessons Learned	looked in buils eye. This had also occured in all of P1601's buils eyes on initial startup.	Near stalled tube of flow from Loss gear box P1601A	Near Loss	Closed	PM 1:00:00	CA - 1844B Refinery	18446

Richmond, CA -	Richmond. CA- 19252 Resinery	Richmond. CA. 19252 Rethory	Richmond CA - 19242 Refinery	Richmond CA - 19241 Refinery	Richmond CA - 19219 Refinery	Richmond CA 19202 Refinery	Richmond. CA - 19184 Refinery	Richmend, CA - 19111 Refinery	Richmond, CA - 19100 Refinery	Richmond, CA - 19091 Refinery	Richmond, CA. 19913 Refinery	Richmond, CA - 18999 Refinery	18958 Refinery
11/15/2010 12:00:00	8/3/2011 7:49:00 AM	8/3/2011 7:40:00 AM	8/3/2011 8-30:00 AM	8/3/2011 6:00:00 AM	8/3/2011 1:00:00 AM	8/2/2011 3:30:00 PM	8/2/2011 9:30:00 AM	9/1/2011 3:15:00 PM	8/1/2011 10:40:00 AM	8/1/2011 1:11:00 AM	7/31/2011 5:30:00 AM	7/30/2011 12:00:00 AM	11:00:00 AM
Clased	Clased	Closed	Closed	Closed	Closed	Closed	Clased	Closed	Closed	Closed	Closed	Closed	Closed
Loss	Loss	Loss	Near Loss	Near Loss	Hear Loss	Near Loss	Lass	Lass	Neer	Near Loss	Near	Near	llear Loss
Tumaround exlension of schedule and overnun of budget	EE FELT POP IN LOWER RIGHT SIDE OF BACK	EE FELT POP IN LOWER RICHT SIDE OF BACK	Green Card. Several processes have been changed for the P&MM group without any documentation. Location: P&MM	Green Card. During heavy construction at South Yard, traffic was limited. Location: GMG facility	Feed pump stud down for unknown reason	Contractor reported back discomfort sent to Chevron clinic for pre-caution	Particle in the eye	Employee pulled off road to answer cell. Car drifted into guard rail.	A pickup truck backed up off the roadway near 83 Tank Pad	Green Card, Mushrooms growing on outside of building, Lecation: 230B Mein	Operator eye was swollen and extruding fluid, it was throught to be ZMX contamination. It was a personal medical condition.	DHT (sed pump tost suction due to 3 S/C stripper level control.	solids in 2 Sep,
4Q11 DHT Cal Change TA want over schedule by 5.5 days and over budget by ~\$500M	EE WAS REMOVING BOXED MATERIAL RECEIVED FROM THE STOREHOUSE FROM A STOREHOUSE BASKET WHEN HE FELT A POP IN THE LOWER RIGHT BIDE OF HIS BLOCK THE EE HAD BRAGED HIS RIGHT THE LOWER RIGHT THE BASKET WHILE LEANING HIS UPPER TORSO TO THE RIGHT AND OVER THE EDGE OF THE BASKET WHEN HE FELT THE POP	EE WAS REMOVING BOXED MATERIAL RECEIVED FROM THE STOREHOUSE FROM A STOREHOUSE BASKET WHEN HE FELT A POP IN THE LOWER RIGHT SIDE OF HIS BACK. THE EE HAD BRACED HIS RIGHT KNEE AGAINST THE BASKET WHILE LEANING HIS UPPER TORSO TO THE RIGHT AND OVER THE EDGE OF THE BASKET WHEN HE FELT THE POP	Several processes have been changed for the P&MM group without any documentation. No MODC, no new procedures, no RI changes, i.e., Nekco, hoses, Pold of Use safety equipment, sever balloons.	During heavy construction at South Yard substation, traffic was limited and GMG yard adapted its traffic throughput to compliment Petrotite St. Heavy construction is done.	P4040 Feed pump stut down for unknown reason. Would not reset	Contractor reported back discomfort to lower back	Employee got his ball cop, which is stored on a hook in his work area and started placing it on his head when he felt something enter his eye. Employee was wearing his safety glasses at the time.	Car Door denied wille employee pulled off road to answer call.	After haaking rebar cepes into his pictup truck, the amployee attempled to pricon a 3 point humarcund in this routeway near 53 Task Paul, in the process the misjudged the distance to the edge of the road causing him to roll down the 3-bort embahyment. There was no properly demage or injury caused by the incident.	Green Card. Mustrooms growing on outside of building on back of building. Location: 230B Main	Operator, had a eye swelling and satroding fluids. The operator thought lifely had gotten ZAX in their eye. Plant protection was called and thised the eye and sent the operator to the Martines called. The direct further lessed and fragalised the eye. The circle medically discovered that the lessue was not ZAX contamination to that were present medical condition. The operator returned to work after treatment of the eye.	Crude unit had recently taken a crude feed switch. Operators were regulating the amospherits gibe cuts to accommodate the new feed qualities. Ops were adjusting the 3 S/C stopper level control and inadventantly starved the suction of the DHT (sed pump, causing the pump to trip. Ops instantly recognized the proximal re-established deed to DHT and recovered from incident	
Business Process	Rt-injuryillass - Employes injury	เริ่มส่วนให้เครื่อ	NL-Lessons Learned	NC-Lessons Leamed	NL-Operational Process/Procedures - Plant Run Out/Slow Down	NL-injury/illness - Contractor injury	โญ่นาy/ให้กอรร	Equipment/Property Damage	NL-Transportation - Contractor	NL- Equipment/Property Damage - Equipment Damage	NL-injury/liness - Employee injury	Nt-Operational Process/Procedures - Sefety Systems	NL-Quality - Incorrect Volume
(1) PED: -unanticapted colorg of casityst caused longer than scheduled dump; (2) INSEECTION - lack of fusiory or Beltonia further sesses made it Impossible to predict its contrillon. Was now have the data for future maint windows; (3) OPERATIONS - ops had concerns with pipe class on itemp pipe and its propertasting. (4) OPERATIONS - Reactor champe took integer than anticipated using current procedure	(1) No warm up prior to task of litting boxes. (2) No warm up prior to task of litting boxes, (3) Incorrect flody Positioning for reaching for boxes, (4) electing mechanism on delivery basket needs redesign, (5) incorrect Body Positioning for featching for boxes, (6) Work group was not aware of swing door on basket. (7) Employee was not aware of swing door on basket	(1) No warm up prior to task of filling boxes, (2) No warm up prior to task effilling boxes, (3) incorrect Body Positioning for reaching for boxes, (4) Luchting mechanism on collevey basket needs radesign, (5) incorrect Body Positioning for reaching for boxes, (6) Work group was not aware of swing door on basket, (7) Employee was not aware of swing door on basket.					(1) Dust particles that came to rest in employees cap which is harrying on a hook in his work area, (2) Dust particles come to rest in employees cap which to stored on a hook in his work area.	(1) Car was not place in park prior to use of cell phone.	(1) While the employee was making a 2 pt turnaround he misudged the distance to the edge of the roadway. (2) There was no delinastors or markings to identify the edge of the road. No guard rail or cuts bustage.	-		•	1 07-29%205-Why%20Sollds%20In%20no.%202% 20Separator%20R1.cocx

	NL-Operational Process/Procedures - Plant Run Out/Slow Down		DCMA #3 stopped working upon attempt to raise the arm onto the Sunset Bay barge that was here to load HSFO.	Bd Coss	6/7/2011 8:30:00 Crosad	Richmond, 6 CA - 19504 Refinery	19504
(1) Operator did not follow procedures for draining DCMA profit of sconnecting from vessels.WHF9882J Clearing DCMA's.	NL-Business Process		DCMA #3 slapped working upon attempt to raise the arm onto the Sunset Bay beige that was here to load HSFO.	Near Loss	8/7/2011 8:30:00 PM Closed	Richmond, 8 CA - 8 Refinery F	19504
(1) Board operator exited dryer regeneration early without checking V-1940 udder levet. (2) Procedure incorrectly states to open inseation rative at the boy of the dryer when putting it into standby mode., (3) Normal practice is to only notify LPG Racks when unable to ewap dryers following a well feeze (see it.)	NL-Quality - Product Quality (int)	AD-3 operator reports V-1942 was placed in service on day shift after regenerating for 48 hrs. and propane does not pass the freeze test. V-1941 is currently reponenting. Operator rechecked propens @2:00 AM and it still does not pass the freeze test.		Near Loss	8/6/2011 8/00:00 PM Closed	Richmond, 8 GA - 8 Rolinery F	19446
(1) Single globe block valve at 8 Plant boundary does not provide tight shubdit to prevert water contamination of H13 header ching 8 Plant deeauty, (2) Procedural changes have been discussed to wern of and potentially asgregate wet ammonia ching plantined plant cleanups, but no investigation solutions were documented to ensure and verify changes were made	Environmental	The Cogen Units received a contaminated steam of NH3 from the normal 2" supply line from the yard. This caused the Cogen units to exceed their normal advances to the Stack Nox emmissions for a number of hours. During this time the Cogen Operators are experiencing ematic operating conditions of the Nh3 system until the contaminated product is flushed through the system and the concentrated Nh3 quality is restored.	Contaminated stream of NH3 supply to the Cogen Units	sed Loss	8/7/2011 4/53:00 AM Closed	Richmond, 8 CA - Rofinery	19443
(1) New Pour Point Analyza' Cassial Factor #1: Procedure not available The operating procedure for the pour analyzer is not currant and is for another (obsolets) analyzer. In the RLOP EOM wite, only the obsolete analyzer is procedure as on our of the procedure is evaluable, but is only accessible from CD's 150 b001 SOP and not in linked to RLOP's. Prior to the lab move operators were outlinely running and chafting results indicating they were familiar with operating procedures on the Till analyzer. MJC was completed for new analyzer but tinks not completed. Root Cease: Importance of ISO 9001-2008 has been loss. Caussi Factor #1: Oversight-Infrequent Audits & Evaluations There is no eccountability for not traviley and chafting sisnataris. Results and charts were not reviewed over quite some time, yet no one is held accountable. The ISO Quality Manual (Sec. 5) clearly states that statistical techniques are used to monitor our processes and that calibration of the base oil lab equipment is checked by running known signated as end charted on SPC control charts to insure they are accurate and reliable. The ISO Quality Manual (Sec. 5) clearly states that statistical techniques are used to monitor our processes and that calibration of the base oil lab equipment is checked by running known signated as and chart calibration can be pulled unit conformance and ISO certified as part of the operator's ruchine thy. Failure that is of insure they are called the control of the comply can lead to a major non conformance and ISO certified. Being ISO certified is also part of our contractual agreement with our customers, (2) Root Cause: Lob Move Casust Factor #1. Standards; Poicles or exciptment was completed to the customers and to show here move is spread of the completed, operations charts and to follow part procedure such as the move of the completed of the control casust and control casting and chart in the location of the label of the completed, operations control and to felt Minke intera Trac Indicated all leasts were sign	Quality	The lab control charts for finished base oil at the RLOP lab have not been consistently filled out show February 2011. These standards ensure en-spec base oil is being produced at RLOP. This is critical to malishining RLOP's ISO-9001 certification. The control chart process involves running standards on the fish matchine, who pour point marchines (ane for LHF), and the fish matchine for pour as well as HNP cloud was found in a separation notabook in table formet. (This data should be charted in the central ISO-5001 control chart book.) The data is other missing or never taken (except for the few samples in the central ISO-5001 control chart book.) The data of ISO-5001 control chart book.) The data of the first signary or never taken (except for the few samples in the central ISO-5001 control chart book).	The lab control charts for finished base oil at the RUP lab have not been considerity, filled out since February 2011.		2/18/2011 112/00:000 AMA	Richmond, 2 CA.	18414
	Nt-Operational Process/Procedures - Safety Systems	ItiM had Dos switch from K-242 to K-252 to gather data. At end of shift IM had Ops switch facts to K-242. During this operation, the KO part level went high, and shut down compressor. Ops continued to blow down KO pol loss agressively and to established compressor flow. There was NO VISABLE FLAME.	Loss of K-242/K-252 due to high Equid level in KO pot	Near Loss	8/4/2011 4/40:00 Closed	Richmond, E CA - Refinery	19352
(1) Not wearing sealed eyewear	Injury#itness	Employee was exiting the netroomwhen a guet of wind blaw a particle into his left eye. Employee stated that he was wearing his safety glasses at the time of the incident.	particle in left aye	sed Loss	8/4/2011 1:05:00 Closed	Richmond, E CA - Refinery F	19346
(1) Not wearing sealed eyewear	NL-injury/iliness - Contractor injury	Employee was exiting the restroomwhen a gust of wind blaw a particle into his left eye. Employee stated that he was wearing it's safety glasses at the time of the incident.	particle in tell eye	sed Loss	8/4/2011 1:05:00 PM Closed	Richmond, 8 CA - Refinery F	19346
s (1) Scheduler did not allow enough mixing time for the two crudes	NL-Business Process - Business Interruption	The Astropheonix discharged 199 MB of Vessconia into T3101. At this time, T. ML-Business Process 3101 had about 230 MB total int. After mixing, settling, and sampling the stank. Business Process we had straitfication in it which prevented a tank switch and held the 5thp up. Interruption	after the discharge of the Vasconal on 7/23.	Sed Loss	A:00:00 Closed	CA - A	19345

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19732	19712	19701	19699	1989	1960	1959	19587	1956
Richmand, CA - 2 Refinery	Richmond, CA - Retinery	Richmord, CA - 1 Refinery	Richmond, CA •	Richmond, CA -	Richmond, CA - 19504 Refinery	Richmond, CA - 18597 Refinery	Richmond, CA - 7 Refinery	19565 Refinery PM
9.00:00 AM	, 8/8/2011 12:00:00 AM	. 8/10/2011 10:52:00 AM	8/10/2011 \$:30:00	8/10/2011 5:30:00 PM	8/9/2011 12:00:00 AM	627/2011 6:15:00 FM	8/9/2011 10:40:00 AM	PM 00
Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
Near	Near Loss	Loss	Loss	[0]	Near Loss	Near Loss	Loss	Loss
P-35 Molor Fallure	MerganChase reported suspicious activity on an employer's procerd. Appeare that a 3rd party had obteined access to card information.	Supersack of CS31 packing/rust & scale started smoldering	First aid Operator cut finger on broken glass.	First and Operator cut finger on broken glass.	Smoking post behind Cafeteda found to be missing a Hot Work permit	Near Active Directory Server not	#1 Power Plant Boller Feed Water Burn	during feed switch from T- 3101 to T-3100
Reported Ground fault at 17 PS.	MorganChase reported suspidious activity on an employee's procard. Appears that a 3rd party had obtained access to card information.	Plant operator noticed a super sack of packing rings, rust and scale that had been removed from CBO1 was smoking. Plant profection was called immediately, the contents of the super sack were water soeted. All material was then shoveded into easied drums to prevent it from self heating again.	Operator had puries a DEA sample using a 4 oz sample bottle, in the process of nunting that sample the sample bottle in over and book. Half of the bottle was on the 2 over and book. Half of the bottle was on the 2 over and book. Half of the bottle operators left fool. The operator picked up the pilecas of glass and disposed of them. The operator began supplying up the spilecd DEA with a wypail lowel. A small pilece of glass was still on the ground and white in operator wheel the towel across the foor the glass produced a small cut to the paths side of his towel across the foor the glass produced as ratil cut to the path side of his towel across the foor the glass produced as ratil cut to the path side of his towel across the charginal gloves of fines defined gloves. The operator some of the charginal gloves of fines defined fines that our unit may water. The operator soplyed direct prossure and operation informed the ST. The STI. In other than the had operation followed the STI. The STI. Informed the RSI, and the Battalian Chief. The STI. drove the operator to the link owher the the draw wook be to stop he beloeding, chan he email act and apply a drassing. Employee was released back to work with no restrictions.	Operator net puties a DEA, asempte using a 4 oz sample bootle, in the process of aunting that sample the ample bothe fell over and backe. Hat' of the bottle was on the floor to the left of the operators left foot. The operator picked up the pieces of glass and disposal of them. The counties have been supported by the pieces of glass and stopped them. The operator began supplying up the spited DEA, with a wypail towell. A small piece of glass was still on the ground and when the operator wiped the towel ecces the floor the glass produced a small cut to the pains stell of his middle finger. The operator appropriate was wearing chamical gloves. The operator semoved the chamical gloves and insend the floor the glass produced a small cut to the pain side of his fine operator applyed direct pressure and proceeded into the control house to inform this head operator. The shad operator informed the STL. The STL. The STL informed the RSL and the Baltalion Chief. The STL Chas's the shad operator of the product of the operator of the shad operator of the control house to inform the real and and were able to stop the bloeding, chem it is small cut and apply a directing and and are also to stop the bloeding.	An employee Inspected the Smoking Post behind the Cafeleria and found that It did not have a vatid Hot Work permit. The employeer inspection was triggered by a learn discussion of R1341 associated with the 3rd Quarter Proactiva event.	RSL coude not get into XHQ. XHQ Admin asked frehouss in check, also could not access. XHQ Admin checked server rom, logs did not indicate any problems. Authentication server was not running. Some issue with IIS, updated from Cet to Yorn Cet to where also were too many groups. Rebooted server for incx 2, I not 1 was a nutriting slow, a server to RIC 100. Sent toxid not find XHQ. Admin's CAI either. Manually set logon server to RIC 100. Sent toxid message to XHQ. Secondary support person. Talked to infrastructure Primary support person. Talked to infrastructure Primary support person. Talked to infrastructure Primary support person on the Active Directory server. ITC needs to check the event log to see what insponned, why I did not fall back to the other local servers. Server labels were not common, need better instructions. Server takes 30-45minutes before dalabases are ready.	EE was puting the boiler feed water header its. The bleeder want had a hose attacked and positioned to a drain at grade. Bileaded realize was cracked open to memore at: When Pizo was introduced at 1200 its., It caused the end of the hose to move in the upward direction spitishing the EE just above the bool fine. EE called their HO, who in turn called the STL. Plant Protection was notified and responded.	water probe on the 21 Charge Line spiked for 2 minutes elerting 4 Crude. At 15:00 they received water for a period of about 15 minutes.
NL- Equipment/Property Damege - General Liability	NL-Security - Misconduct by Employee or Third- Party - Criminal Activity	Fire/Explosion	NL-in-jury/Hiness . Employee Inkury	injuryilliness	NL-Business Process - Business Process	NL-Lessors Learned	(n)ury/liness	Nt-Quality - Product Contamination (Int)
(1) Procedure or acceptable practice exists and is technically right. However it needs to be improved to improve darily, 2) Procedure or acceptable practice exists and is technically right. However it needs to be improved to improve clarily, (3) Procedure or acceptable practice exists and is technically right. However it needs to be improved to improve clarily, (3) Procedure or acceptable practice exists and is technically right. However it needs to be improved to improve clarily.		(1) Use of improper contahar	(1) Broken bolte not deened up property	(1) Broken boille not cleaned up properly		(1) 5. doing the job according to acceptable practices takes more time	(1) Leck skill or knowledge. Unecessary to displace air when plearing DFW line in service. High point vents are preferred when venting air not lowpoint bleeders. (2) in the recent past a steam hose was used and no incide	(1) Line not flushed after recovered on job completed

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	20117	19984	19908	19849	19849	19837	19826	19753	19724
	Richmond, CA - Refinery	Richmond CA - Refinery	Richmond, CA- 19809 Refinery	Richmond, CA -	Richmond, CA - Refinery	Richmend, CA - 19837 Refinary	Richmond, CA - Refinery	Richmond, CA Refinery	Richmond, CA -
	8/15/2011 9:00:00	8/16/2011 2:30:00 PM	8/15/2011 11:50:00 AM	8/12/2011 12:00:00 PM	8/12/2011 12:00:00 PM	8/13/2011 8:28:00 AM	8/13/2011 2:00:00 PM	8/10/2011 6:00:00 PM	6/9/2011 12:00:00 AM
	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Clased	Closed
	L Ne sar	- Coss	Near Less		Near	Nam Nam Nam	Near Loss	Near	Loss
	S&S Provided 4 Detective Respiratory Traking	Particio in the Eye	unintentional loss of steam due to PRD commissioning	Hydrocarbon at 2A Separator from DEBRU outlet	Hydrocation at 2A Separator from DEBRU	Honeywelt App Node failure resulted in loss of DMC controllers and GDOT optimizer, degraded system performance	T-3072 secondary high level starm cable deteched during testing	Comminunication breakdown	FT-220 Flow mater failure
A respiratory training class for 2 CVX new biras was given on 8/15/11. Both were being trained on the use of the Scott AV 300 and North 7600 safes half face respirators. Owing the hands on practice with the North 7600, both RE's removed their masks from their bags. From one bug, a plastic place belonging to the mask fall out. The other mask had both inhalation valves stuck to their	A respiratory itaining class for 2 CVX new hires was given on 8/16/11. Both were being trained on the use of the Scont AV 300 and shorth 7800, series stall see respirators. During the hands on practices with the North 7800, series stall see respirators. During the hands on practices with the North 7800, series standard their mask fell out. The other mask had both inhalation valves stuck to their sears not allowing the EE to inhale. A second North 7600 mask was issued for use and while performing a user's hapecified, it was noticed gaskets were missing and the exhelation valve was cocked and not sealed properly. A positive pressure test would and could these been performed for a face seal and it would have sealed not detecting that the valve was cocked allowing the user to potentially be exposed. During the hands on practices with the Scott AV9000, the EE noticed that the neep piece was robuilt at an engle and he coulding place his face in the mask. Four of six respirator faining masks	VM, While working inside of #4 Boller freebox granding, EE felt something make contact with his eye. EE was weening helf face respirator, safery glasses and a face sheat. Particle in eye? Externely Dusty in the box. W, wearing plasses instead of goggles W, weare prescription glasses.	The CGT-800 PSV lifted on the 500# steam exhaust header.	TOP NLYESYIGATION - For complete report, sees attended link. IN/ITAL REPORT - 2 hours after crude tank switch to T-3106 V-1102 desaker while to DEBRU visual naspection indicated high hydrocarbon content. V-3212 DEBRU oil skin forum developed high level and had difficatly gailing out to to 400 feed (normally routed to lower pressure T-3128 at 67 T-3128 but both are out for maintenance). This ted to hydrocarbon carryover to filters, plugging of downstleam carbon filters and hydrocarbon breakforcegh to 2A separator and comstituem carbon filters and hydrocarbon breakforcegh to 2A separator and bit meactor. Bits reactor dissolved oxygan levels faceped and K-10 was turned on to increase oxygan levels. Low oxygan levels face to kilding bioractor bugs that remove loads compounds before discharging to buy. Discharging loxic compounds to bey lead to environmental degradation and possible fines.	1/OP NWESTIGATION - For complete report, see alteched link, INTIAL REPORT-2 hours after couds tank switch to T-3108 V-1102 desails water to DEBRU visual inspection indicated high hydrocarbon content. V-3212 DEBRU oil skin forum developed high fevel and had difficulty getting oct to to 40U feed (normally routed to lower pressure T-3128 or T-3128 but both are out for maintenance). This ted to hydrocarbon carryover to filters, plugging of committenance). This ted to hydrocarbon treatyover to filters, plugging of committenance) are actor dissolved oxygen levels dropped and K-10 was turned to no increase oxygen levels. Low oxygen levels dropped and K-10 was turned to no increase oxygen levels. Low oxygen levels dropped and K-10 was turned that remove hote compounds before discharging to buy Dicharaging loxic compounds to bay lead to environmental degradation and possible fines.	Al 8:28 A.M. App Node 30 in D&R West talled, losting communication with the DMC server. After the 10-minute line-out period, at of the D&R West DMC's structions, Open size also experienced long praphic loading times for graphics that contained DMC tags, due to the loss of App Node 30.	Outing monthly testing of the T-3072 (HREF) secondary high level starm, the cable sitached to the counterweight detached from the test arm and fell ento the tank root.	Did not get limy update on torch oil job status form plant, I faset to notow up, before meinteriate left for he day. This left the REL up of the loap as to plant status, didn't validate contingercy plan with on comming crew.	"a" a~
	NL-Operational Process/Procedures - Safaty Systems	injury/iliness	NL-Lessons Learned	Nt. Environmentel -	Nt. Quality - Product Quality (nt)	NL-Business Process - Business Process	NL-Operational Process/Procedures - Safety Systems	NL-Lessons Learned	NL-Regulatory Compliance - Non Compliance - Air
	- (1) INADECIATE OVERSIGHT OF QUALITY CONTROL FOR THE MAINTENANCE OF RESPIRATORY MASKS	(1) Improper PPE, Not wearing a full face respirator or goggles		(1) SOS: Mahnenance & Inspections: Back up tanks to T- 3/26 were not readily available. T-3/28 on recirculation and healing "1-3/27 bockled in for a separate project." T-3/44 docommistored Tyears ago., (2) SOS: Maintenance & inspections: Undercarry of cill into water effuent from deatiler. Desailer did not completely apparate writer from oil. Demulsifier injection could not keep up with unexpected studge volume., (3) SOS: Design & Englareing: Extra sediment RO had been routed to crude feed tank T-3/96, it is not abnormed to route to tankege. Only place it can currently be routed to.	(1) SOS: Maintenance & Inspectant: Back up tanks to T- 3128 wate not readly available. T-3124 no relativation and heating "T-3127 becked in for a separate project." T-3144 decommisioned 7 years ago., (2) SOS: Maintenance & Inspections: Virdercomy of all into vactor etituont from desalter. Dessiller did not completely separate water from oil. Demulatifier injection could not keep up with unexpected studge veltime., (3) SOS: Destine & Engineering: Exite asdiment RO had been routed to crude feed tank T-3106. It is not abcroment to route to tankage. Only place it can currently be routed to.	(1) System error (\$\$VVS, Master) Indicates App Node received a duplicate network message causing the node to stop functioning property. The reason for the duplicate message is not known.	(1) Unknown root eases. This is an un-common failure towers, the system is designed as a fail-safe and will activate an atam, when the context buches the tank root even if the tenk is not at a high level		(1) The flow meter was not viewed as necessary to verify we stayed in compliance so it wasn't trosted the same as a parametric meter when it raited, it was believed we could prove compliance without this meter, (2) The Tille V CEV page does not include separated flow meters as a means to mentior flow. The page needs for or viewed and updated, (3) ABU Operations was not aware this meter is used for compliance reporting.

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	20244	20234	20226	20216	20216	20206	20201	20195	26	20132	20117
	Richmond, GA - Refinery	Richmond, CA - Refinery	, α	Richmond, CA - Refinery	Richmond CA - Refinery	Richmond CA • Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Rehmond, CA: 20144 Refinery	Richmand, CA · Refinery	Richmond, CA ·
	8/20/2011 2:30.00 AM	8/19/2011 9:00:00 PM	8/20/2011 1:00:00 AM	8/19/2011 3:00:00 PM	8/19/2011 3:00:00 PM	7/28/2011 10/20:30 AM	8/18/2011 8:00:00 AM	8/19/2011 8:00:00 AM	8/8/2011 3:00:00 AM	8/11/2011 12:00:00 AM	8/15/2011 9:00:00 AM
	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
	Loss	Near Loss	Loss	Loss	[0 <u>5</u>	Near	Near	รรดา เกียลเ	Near	Mear Loss	Near
	Timec, placked fager	73pc710 output fow starm	Particle in the Eye	K-242 tripped out end K- 252 world not start	K-242 tripped out and K- 252 wolld not start	Railcar offload edjustment was entered incorrecty and 8 days tater after our monthly stock count.	White dragging rescue manikin the strap broke causing EE to stumble	"Polymer like" material found in the washdown station.	High water and chlorides in T-1899 post Emergy Century discharge	Possible (riphtell hazard Ont wot RM 137	S&S Provided 4 Defective Respiratory Treining Masks
Flow meter was erronbously reading high flow rates during a minor flaring	Time EE was using a torque wrench on a manway to C-831. While pushing (Luming) the wrench to lighten a stud, his pinky finger on his left hand was coughly between the hand reliand the longue wrench. EE pinched his finger between handrall and wrench. N. hand ween't in It's proper position for the test. W. Not paying attention. W Complacency.	Received output low atarm on owest for 73pc710. Area and Head operator went to verify transmitter with local PI. Local pressure gauge indicated higher pressure han transmitter. Output atarm in places was an excellent fold to help recognize potential safetiles on V712 to lift causing an environmental event.	WWW. EE was welding inside of the weld bay at the time of the Incident. Perfide in the eye due to high wind. W, No pooled eye wear, W, Didn't feel it was needed working in an enclosed area. W, Didn't think the wind would be an issue inside the enclosure.	K-242 was on line and intoped due to power factor, K-252 would not start. Totalizer tripped, but visable flame NOT observed.	K-242 was on line and Inoped due to power factor, K-252 would not start. Totalizer tripped, but visable flame NOT observed.	A railcar critoad adjustment (G5) was entered incorrectly and after the monthly stock count. The sectual amount 346 ga was captured in the July 11 ed.; gain and the incorrect qty, of 2,554 ga was entered atter the count resulting in the books a syring was had more qty, swallable than we truly had. This could have caused a brancing problem since the system said we had more than we had. Also an ordering problem, if not caught, this would have also resulted in a book to physical adj. (01) of 2,007 ga gain instead of the correct qty. of 53 geton gain.	While drauging rescue manikh the strap broke causing EE to stumble feeling a slight pull in his Right calf	While sticky polymer malerial was discovered all over the left side of the washdown area. The source is currently unknown, investigation to follow.	Ship samples from the Energy Century sent from Panama did not indicate helpic chiorides a reviser. The ship artivate of high on BAT (Sunday) with 390 MB of LSVRR, Shie borgan discharging the first 110 MB irbt 7-1899 at shoot 03:00 has on 86 (Monday) and finished at 18:00 has on 86. She then he span to discharge the remaining 270 MB into T-3103 at 19:00 has on 86. Fer Sax Lims, first lank samples on 1-1899 were pulsed at 18:00 has on 86. Fer Sax Lims, first lank samples on 1-1899 were of the high water (results attached). This tank was lived to satisfie the sample of the samples of the high statement of the sample of the samp	Due to shut down achity, a large number of office supplies were purchased and temporarily stored in the action office, CMT RMT RM 137. A contract an employee worked around the issue by stepping over and around boxes and at one point her food struck the conner of one of the large boxes. That is when the curtiant employee moted the unsafe conditions.	use and write performing a user's inspection, it was noticed gaskets were missing and the surfabilition valve was cocked and roly scaled property. A positive pressure test would and could have been performed for a size seal and it would have scaled not detecting that the valve was cocked allowing the burned on practice with the Scott user to potentially be exposed. During the hands on practice with the Scott AV3000, the EE noticed that the pass piece was rebuilt at an angle and he couldn't place his tace in the mask. Four of six respirator training masks removed from their begs were found to be defective.
	injury/filnoss	NL-Operational Process/Procedures - Safety Systems	injury/ម៉ាលទន៖	Equipmen/Property Damage	NL-Environmental -	NL-Regulatory Compliance - Non Compliance - Company Folicy	NL-injury/iliness - Employee injury	NL-Lessons Learned	NI-Quality - Product	NL-injury/lliness - Contractor injury	NL-Qually - Product Quarty (Ext)
(1) 505: TRAINING & PROCEDURES: GUDELINE WAS NOT USED DURING INSTALLATION, EXPERIENCED MECHANICS FELT COMFORTABLE DOING THE TASK.	(1) Body Position, Pinch Points	(if Low output elem on 73PC710 Why - leasts were plugged (area operator and HD field verified with local PI) Why: steam fracing was blocked in, (pro-bably not returned to service effor mshl.) Why - lask overlooked After maint the steam recing to 73PC710 was not put back in service causing the leads to plug during cold weather. The low output amm activated idonlifying the issue, so the system worked.	(1) Changing Condilon, High Winds			(1) What: Book inventory Loss of Gain Why? Calculations using strapping charts that are unreliable. Why? The process followed led inventory out of balance. Why? There are too many variables with current process. Solition Rewrite work instructions to reflect receiving additive based off of tank rise.		(1) for documentation purposes	(1) Scheduler rejied solely on composite Pansma samples.		(1) INACECUATE OVERSIGHT OF QUALITY CONTROL FOR THE MAINTENANCE OF RESPIRATORY MASKS

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	20513	20512	20511	20495	20494	20437	20435	20348	20348
	Richmond, CA ·	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmend, CA - Refinery	Richmond, CA - Refinary	Richmond, CA - Refinery	Richmond CA - Refinery
	8/24/2011 7-45:00 AM	4/3/2011 10:20:00 AM	8/24/2011 11:59:00 AM	8/15/2011 12:00:00 AM	9/22/2011 12:00:00 AM	9/23/2011 3:30:00 PM	7/26/2011 12:00:00 AM	8/8/2011 9:00:00 AM	8/8/2011 9:00:00 AM
	Clased	Closed	Ciosad	Closed	Closed	Closed	Closed	Clasad	Closed
	C 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Near Loss	Loss	Loss Ss	Loss Near	Near	Loss	Coss	Loss
	While gelling ready for the work day, the employee noticed his right hand was not upon rolling up his sleeve Sund a red spot on his right wrist with a red steek running up his sleeve Sund up his arm to his olow. The employee assumed he had been blien by a spicer, Flank Protection or was contacted.	Green Card. E-340 Oil leak	Disabled Aerial Work Platform rolled off side of semi tractor trailer	Point to Point new system Not connecting to Trunking s system properly	Channel 4 of Trunking T Station in failure Mode and I locked out.		Inspection hatches at #13 separator failed a BAAQMD VOC inspection	Inoperative Monitor was not reported within sequined time.	Inoperative Moniter was not reported within s required time.
At approximately 7:40PM the OWS-1 received the HI deka pressure elemn between 4-125 and Eliam gas recovery (68PD1053) and called the Area operator to Set up to condensate wash the FOR discharge Fin date F-1051. The Safety Using the job aid FGR5/N01. doc the outside area operator lined up condensate to the discharge of K-1090 and began water washing at SciPM-Martier west began to misse quickly at 50.5PM, and the High level alarm in X-1053 counded. At this lime the operator Blocked in the west water and operator the time by press to Y-1950 to help toget level in X-1051's 100 to the press to Y-1950 to help toget level in X-1051's 100 the press to Y-1950 to help toget level in X-1051's 100 to the pressor to Y-1950 to help toget level in X-1051's 100 to the pressor to Y-1950 to help toget well as 1.1 PM the Flare gas compressor K-1050 SD on High High level in X-1051, At about 8:25PM the bypass line to X-1950 began to get warm throughout and level quickly began to bypass line to X-1950 began to get warm throughout and level quickly began to	Prior to the work activities taking place, employee claimed he was apparently bitlen by en insect or het some kind of a resolion or insection. We cannot confirm yet whether or not it is an infection or insect bits at this time.	Green Card, Oil feak from top of E-340 to gound level big spill on ground Location: Top of E-340.	Two contracted employees, while loading a disabled aerial work platform onto the back of the delivery trailer, had rolled he equipment off the iral ar side onto the prount. The disabled work platform was being whiched onto the trailer. The hydrautic brailer system was disabled, in order to whosh aerial work platform onto the trailer. Once the Aerial Work platform was on the back of the trailer, contractors used local rocks as chocks to hold the wheels. When attempting to sift the order of the feel craused the sent as work platform to move forward, until it rolled off the trailer completely.	new Paint to Paint system lossing connections with the Older funked system.	Chennel 4 had transmitter broakdown due to faulty amplifiers and age.	While putting P-737A on stand by effer robursing from maintenance, the pump stanting. After shutting down the pump and adjustments made to the APS selfing, an alternity was made to place P-237A on APS segain, but the other pump shut down. F-731 went to minimum fire as a result.	A BAAQIAD YOC inspection of all three API separators revealed two haloVinspection covers at #13 separator outfall sump to not be vapor Eght. They showed VOC teaks in excess of the 500 ppm limit.	Flow male: was erroneously reading high flow rates during a minor flaring activity. In order to correct issue, vander was contested and solvice was given activity. In order to correct issue, vander was contested and solvice was given to involve Maintenance in disabling Channel i of the two channels for the meter. The DCS was never programmed to receive reduction information on Molecular Pregist (as wet as a Fresause and Temperature) and disabling Channel 1 caused a lack of continuous data. Medic advised HES personnel that claim would be logged, but not confluence data. The Compliance personnel did not report in operative monitor within the time required.	activity. In order to correct Issue, vendor was contacted and advice was given to involve Maintenance in disabling Channel 1 of the two channels for the meter. The DCS was never programmed to receive reductant information on Molecular (Weight (as well as Pressure and Temperature) and disabling Channel 1 caused a lack of confunduate data. Vendor advised HES personnel that data world be logged, but not confinous data. The Compliance personnel did not report inoperative mentior within the time required.
	NL-injerylinass -	NL-Environmentat - Sp#I	Equipment/Property Damage	NL-Operational Process/Procedures Salely Systems	NL-Operational Process/Procedures Safety Systems	ML-Operational Process/Procedures Plant Run Out/Slow Down	Environmental	Regulatory Compliance	Environmentsi
	(1) Employee was bitlen by some insect outside of the refinery. This is non-occupational, (2) Employee was bitten by an insect off site. This is non-occupational		(1) Why did the mentiff fip cirks the ground? It rolled off the trailer. Why did it roll off the trailer? Rolled forward over insufficient whose chalks. Why did it roll over the wheat chalks? Wheat chalks were noutificient for the test at hand. Why did was use insufficient chalks? Insufficient chalks were closer at hand. "Could have self ill shifted with sufficient chalks." "Trailer could not have been wide enough to take lead. "Trailer could not have been wide enough to take lead. ""Polential, in the future, within wheat is cocked to the right+ Deny load, and take alternate means of pickap.			(1) Field communication was not clost and led to both pumps being shuldown. Hand signals were used to direct expending of control to shuldown the stand-by pump. The area Operator brought these hand signals were for him to shuldown the primary pump.	(1) Design of hatch not meant to be vapor light, (2) Currently there isn't a Routine Duty to docurrent daily Operations Inspections of the hatches, (3) ADU was not ewere a leak would result in an immediate NDV instead of the normal time allotment given to repair	(1) SOS. TRANING & PROCEDURES. GUIDELINE WAS NOT USED DURING INSTALATION. EXPERIENCED MECHANICS FILT COMFORTABLE DOING THE TASK. HAD DONE SAME TASK IN THE PAST. INNEXPERIENCE MECHANIC WAS UNAWARE OF GUIDELINE. ALTHOUGH A GUIDELINE IS NOT RECOURED, IT IS EXPECTED, (2) SOS. MAINTENANCE & INSPECTIONS, PRODE WAS MISALIGNED, PROBE ALIGNMENT MARKS ARE HOT EASILY RECOGNIZED. GROOVES ARE PAINTED OVER. ADDITIONAL MATCH MARKS ADDED OVER TIME.	HAD DONE SAME TASK IN THE PAST, INNEXPERIENCED MECHANIC WAS UNAWARE OF GUIDELINE, ALTHOUGH A GUIDELINE, ALTHOUGH A GUIDELINE IS ONT REQUIRED, IT IS EXPECTED, (2) SOS: MAINTENANCE & INSPECTIONS; PROBE WAS MISALIONED, PROBE ALIGNMENT MARKS ARE NOT EASILY RECOGNIZED, GROOVES, ARE PAINTED OVER ADDITIONAL MATCH MARKS ADDED OVER TIME.

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	20789	20787	20786	20782	20773	20722	20686	20664	20604	20604	20601	20601	20536
	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmand, CA - Refinery
	4/25/2011 12:30:00 PM	4/25/2011 7.00:00 AM	4/21/2011 1:00:00 AM	4/20/2011 8:00:00 AM	8/25/2011 10:60:00 AM	8/28/2011 7:00:00 PM	8/25/2011 9:59:00	8/23/2011 2:00:00 PM	8/25/2011 11:00:00 AM	8/25/2011 11:00:00 AM	8/25/2011 11:30:00 AM	8/25/2011 11:30:00 AM	8/24/2011 8:41:00 PM
	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
	Near	Near Loss	Near	Near	Near Loss	Near	Near Loss	Loss	Loss	Loss	Loss	Loss	Lass
Pipe spect extending off side of goose-neck trailer	Green Card. Employees not wearing a bite helmet. Location: D&R/Petroite		Green Card. Contractor failed to signal while driving forkilft. Location: RLOP/Recovery Rd.	Green Card, Low visibility of storage area, Location: Haz Waste Collection Area	Green Card, Fire water valve near T-1689 is unrafe. Location: Pole Yard Tenks	FF hit head on earphone • Holder dip in mer cab of E- 60	One half barrel of culter spilled into Asphalled ground all Culter Rack, Main Street hear #1 Power Stallon	JP 6 delivery on Oregon Voyager was offiest for freeze at destination	saticle in eye	particle in eye	initation to the eye	initation to the eye	K-1060 Trip caused FCC fiare totalizer trip
P2S employee bumped a wooden sign at the Fire Drill Grounds while transporting a large tiple spool on P2S' goose-nack trailer. The spool extended approximately 2 fost outside the boundary of the failer allowing it to at	I nelled employees iding liner bixes on the road. If one person were to falt off, their hard hat would not protect their head because there is no strep.	Truck driving with headights off, it was raining and he was traveling 22 mph, it was clearly visible on radar screen.	Contractor driving a forklift making a left tum off Channel St Into RLOP unit without making any signel by hend or light.	Then it is couple of steps at the title retenring well that you have to go up by the Seekandor tellis in which floorescent loubs and computer equipment are stored. They are visible only from bottom of steps and not at the top.	Green Card Fire water valve located near T-1689 is unselfe to access due to the steep hisside leading up to valve. During rainy season, hillside is especially slippery. Fire HZO valve #194A_Location: Pole Yard Tanks	While doing weakly inspection on E-80 FF opponed and entered roar driverside door to complete air pack inspection and deening. While clearing FF hit needphones and knocked them off of the clp. When FF failehod deening he backed away and stuck H3 head on the empty headphone cip on the roof of the comperthent causing a faccation to the lop of h13 head. Bandaid was applied to this laceration by snother FF.	Acund 08:50 am at Cultar Reck near #1 Power Plant at Main Stoel, 1/2 bears of culter spited from a Vocile vacuum Inuck, Vooile Vacuum Truck shave been to adding culter at this teck on a routine basis in support of T-3076 studge controval activity almos June, 2211. The truck driver seported throking the focal activated level indicator on the side of the funck several fitnes cluting #6 to adding. At the point whates the truck's level indicator was just below 3/4 full, when he poked the gauge with the process, it shall to liet. The driver immediately furned of the funck's vacuum and closed the source valve, it was then that the driver rodiced that the culter was portflowing from Pressure Relief Valve amplied and opened, it was discovered that the float's am was slicky when rotated and opened, it was discovered that the float's am was slicky when rotating it.	125 MB FOB destination JP8 cargo loaded on the Oregon Yoyager at Richmond 9'19 to 821 and received at San Pedro 8/23 was tested out of spac for freeze point and rejected by the outstoner.	Mechanical pipe filter recoived dirt pertides in his right eye	Machanical pipe fitter received did particles in his ripht eye	Contractor employee comptailing of minor inflation and discomfort in the right eye from an unknown source.	Contractor employee complaining of minor inflation and discomfort in the right eye from an unknown source.	break and slams cleared The Compressor was restarted and Flare gas reader pressure quickly returned to normal During this event the FCC FLOW TOTALIZER TRIPPED AND AN INTERMITANT VISIBLE FLAME WAS OBSERVED BUT NO AUTOSAMPLE OCCURRED.
	NL-injury/likness - Employee Injury	NL-injuryillness - Contractor injury	Nt-Lessons Learned	NL-Lessons Learned	NL-injuryiliness - Employee Injury	NL-Injury/liness - Employee Injury	NL-Environmental - Spill	Gusky	NL-injunyilliness - Contractor injury	injury/illness	NL-injury/lliness - Contractor Injury	injury/iliness	Operational Process/Procedures
							(1) Half a barrel of diesel spilled to the asphalt. Why? The vacuum fruck was over-filled, Why? The gauge was sicking and required the direct to stoke the gauge. Why? The driver didn't slop when he misred the pauge was not functioning properly. Why? Because the driver had done it in the past and there was no regalive consequences.	(1) No results for Fraeze on 5 FVS that his prior to resuming load. (2) QCD resolves 3 PIS and 4 PIS first ins. 1 compartment of loat for treeze & 4GC. QCD does not notify 88.6 STL of all test compartment, (3) Richmond using ASTM DASES, DISTITUTE and Destination customer using ASTM DASES, DS972 has repeatability of +1-0 8C, and D2386 and repeatability of +1-0 8C, and D2386 and repeatability of +1-0 8C, and D2386 first ins prior to resuming loading.	(1) Person removed their spoggles and when they removed them a particle offided thin their eye, (2) Person removed their spoggles and upon removal a particle drifted into their eye, (3) Worker removed spoggles and a particle drifted into his eye.	(3) Person removed their apogeles and when they removed them a particle diffided into their eye. (2) Person removed their spoggles and upon removal a particle drifted into their eye. (2) Worker removed spoggles and a particle drifted into his eye.	(1) Not Job Related: firstallon to the eye was a pre-existing condition that the worker mentioned to EMT's in the area. Worker was checked as a precaution.	(1) Not Job Related; irritation to the eye was a pre-existing condition that the worker monitoned to EMTs in the area. Worker was crecked as a precaution.	(1) Procedure not adequate. Not very detailed with no precautions , (2) P-7051 tost suction

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70 CL	Rica CA 20945 Refi	Rich CA - 20943 Refir	Richr CA - 20941 Refin	Rick CA CA Refe	Richi CA - 2093S Refir	Richi CA - 20938 Refir	Richi CA - 20937 Refin	Rid CA 20936 Refi	Rich CA Refi	Richt CA - 20921 Refin	Richt CA - 20500 Refit	20858 Refi	Rich CA - 20856 Refir	Rich CA Ref	RICA CA Refi	RICA CA Ref	Rick CA CA Ref	20831 Ref
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Richmond, 4/28/2011	4/28/2011 2:45:00 PN	4/25/2011 1:00:00 PM	4/26/2011 10:00:00 AM	4/26/2011 4:30:00 PM	4/27/2011 10.00:00 AM	4/27/2011 6:30:00 AM	4/25/2011 8:00:00 AM	_	4/28/2011 8:00:00 AM	8/31/2011 10:00:00 AM	5/28/2011 8:30:00 AM	4/27/2011 8:30:00 AM	4/26/2011 11:00:00 AM	8/30/2011 11:00:00 AM	8/23/2011 8:00:00 AM	4/25/2011 7:16:00 AM	4/25/2011 12:15:00 PM	PM
	Closed	Closed	Closed	Closed	Clased	Clased	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
	Near Loss	Near	C SH	Coss Toss	Near OSS	Near Near	Near Sear	Near	Near Coss	Near	Near	Naar Loss	Near Loss	Noar Loss	Near Oss	Near	Noser Loss	Loss.
Green Card. Treffic not stopping at posted stop	Green Card. Stop sign down. Location: Zerolene and Mill St.	Green Card, Contractor teading pipe improperty. Location; Lay Down Yard	Green Card, No traffic control in area. Location: No. 8 Warehouse	Green Card, Trash in walkway, Location; Near 91Gate	Green Card. Vehicle driving with with no caution tape, Location: Channel St.	Green Card, Dip in asphalt by railroad tracks, Location: Pond area/Casko site	Green Card. Removing extension cord incorrectly. Location: #8 Plant	Green Cerd. Truck parked on an uneven/steep grade. Location; D&R by Cooking Tower	Green Card. No stop sign posted Locallon: One-way street off Channel St. across from scales at 31Gate	Temporary loss for feed to DHT while ellempling to put P-1149 on line.	Green Card, Walkway damaged: Location: B&S, #7 Pump Station	Green Card. Tank 3106 needs new wind sock, Location; B&S Tank Field	Green Card. Driving flatbed truck with bolite caps off. Location: B&S 93 Weld Bay	P-1801 tripped causing momentary disruption of feed to DHT	Green Card, Pallets are a tripping hazard, Location; Cracking Annex	Green Card, Found out one of the ladders was location; S. Isomax E-338 & E-339	Green Card. Operating a maniff without safety hamess. Location: D&R	damage to the sign,
	Green Card. Stop sign dewn at Zerolene and Mill Street.	Green Card. A contractor was loading pipo onto trailer with forke other than using mask and slings.	Green Card. Warehouse workers were off-basding a truck of pipe, but there was moving traffic. Location: No. B Warehouse	Green Card When going out of watway by 91 Gate, there was trash in walkway making a tripping and slipping hazard.	Green Card. Vehicle driving down Channel St. with pipe extending over the rack had no caution tape attached to it.	Green Card. Dip in asphalt by railroad tracks has gollen bigger by the front gets, it should be marked for both driving and welking. Location: Pond eveu/Castro site	Green Card. Observed a fellow worker pulling an extension cord out of the well by the cord .	Green Card. A truck was parked on an uneven/sleep grade with no room to load the Inuck so I asked them to move truck.	Green Card. At the one-way streat of Channet access from the scales at 31Gate and the strend plands by the water treamment plant, there is no stopp sign at the intersection going either way. Many times I have driven this peth and people are crossing the intersection with their vehicle without looking or yielding.	Operators were stiempting to place P-1149 on tine site maintenance solivity. Flow to the DHT feed pump was temporarily interrupted causing the furnece to go to min fins.	Green Card. #7 Pump Station walkway damagod floor. Exposing hazards. Barricaded area. Noods repair asep. Losalion. B&S, #7 Pump Station	Green Card - Tank 3106 needs a new wind sock.	Groon Card - Chavron vehicle chiving flatbed truck with bottle caps off, Bottles should have caps on when not in use.	DHY was unning steedy-state at 21.5M tead rate. At - 11:00 P-1801 (feed pump) (repeat out, resulting to be furness restoring to min first. Ops resisted pump) (repeat out, resulting to be furness resisted to DHT, product was NOT routed of test (see to the short duration of the outage, and no material was released to the flare.	At the south entrance to the Cracking Annex buikting, patiests of office supplies are being placed. This is creating a tripping hazard for anyone exiting the building. Additionally, a gashage can and like necks ere on the other side of entrence making it is crowded area.	When me and my co-worker was doing a JHA walk inspecting the scaffold, we found out one of the ladders was toose.	Chevron operating a marift without a safety harness.	undemaged
	NL-Lessons Learned	NL-Injury/Iliness - Contractor Injury	NtLessons Learned	NL-Lessons Leamed	NL-Lessons Learned	NL-injury/Iknoss - Employee Injury	ML-tessons Learned	NL-Lassons Learned	NL-injury/liiness - Employee injury	NL-Operational Process/Procedures Safety Systems	NL-injury/iliness - Employee injury	NL-Lessons Learned	NL-Lessons Learned	NL- Equipment/Property Damage - Equipment Damage	NL-injury/limess - Employee injury	NL-injury/liness - Contractor injury	NL-injury/iliness - Employee injury	Transportation
														No causes determined, electrical checks on motor determined ne problems, instrumentation signal from field to thouse are adequate. Pump has ran on spare pump program with no issues.				(1) Blind apot

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	21204	21193	21145	21080	21068	21050	21023	20966	20965	20963	20958	20955	20953
Richmond,	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	CA - 20953 Refinery
9/6/2011	9/1/2011 8/00:00 AM	9/4/2011 1:20:00 PM	9/4/2011 8:30:00 PM	8/29/2011 1:00:00 AM	9/1/2011 7:15:00 PM	9/1/2011 10:30:00 AM	8/4/2031 8:00:00 AM	4/28/2011 9:30:00 AM	4/28/2011 2:00:00 PM	4/20/2011 11:30:00 AM	5/25/2011 6:35:00 AM	5/26/2011 5:45:00 AM	5:30:00 AM
	Closed	Clased	Clased	Closed	Closed	Closed	Chaed	Closed	Closed	Closed	Closed	Closed	Closed
	Near Coss	Hear Loss	Near	Loss	Loss	Near	Neer	Near Loss	Neer.	Near Loss	Near Loss	Near	Loss
	Green Card. Too much oll in the bearing boxes of our equipment. Location:	T-2220 SAAB gauge jumped 4 ft in error	#1 Cross lay charged upon connection to hydrant	Underloaded CBFS by	MVA: B&S / Wharf pickup truck sustained signi demage to driver's side mirror	scalfold material came in contact with off switch and shall of pump.	Pi dala interruption while upgrading frowell operating system	Green Card. Confractor Wilhout a spotter. Location: Maintenance Berth RLW	Green Card. Bolles with no caps, Localism: 9&5/93 Tank Pad	Green Card. Contractor left truck running. Lecation: North Yard	Green Card. Truck driving with no headilghts. Location: Channel and Zylene St.	Green Card, Smoking in portable outhouse, Location; Contractor Laydown Area/Xylene Street	Near signs, Location; 91Gate Loss Contractor Parking Lot
Moves being made at Cogen to remove a 150# steam line from service. During this process, condensete was picked up and water hammered the line to #1	Green Card. Since the move to 220 neutral tube oil, our oil mist generators seen to be adding way too much oil into the bearing boxes of our equipment. High tube of levels can be just as bad as no Jube oil at all; I fear that if something is not done to correct this issue, soon we may start seeing many bearing failures.	The level on T-3220 dropped 13,000 bbls for no apparent reason. Tanks was storyly emplying (~200 bph) before and after the audden gauge change. No other tank level changed to account for the discrepancy.	#1 crosslay charged upon connection to hydrant due to valve on engine being left open causing hose to to expand forcing the hase cover open on top of Foam 60	P-1 went down on low suction pressure so CPS operator restarted pump but had to run at half the rate. 20 mirutes taler the pump loss suction again and could not get enough suction to run it.	Operator couldn't get his TWIC bedge (and vehicle puck) to register on the badge reader at the TWIC gate (by Machina Shopic IR) white driving to the CCD compound, Some TWIC badge reader at Wiffel to register, which rectires the drive to back up and drive forward several times in order to get the gate to peen, in doing so, the driver got too close and the mirror rubbed against the reader and sustenile back premard bre mirror. A dime size place chipped away from the outer edge of the mirror body	PUMP WAS SHUT OFF BECAUSE EMPLOYEE BUMPED THE ON OFF SWITCH, REPORTED TO OPERATIONS IMMEDIATELY. THE AUTOMATIC SYSTEM TOOK CARE OF TISELF. IN THIS SITUATION THE SYSTEM IS SET UP FOR THE ADACENT PUMP TO START AND KICK IN BY ITSELF. THE PUMP DID JUIST THAT IT STARTED UP WHEN THE OTHER PUMP WAS SHUT OFF.		Green Card Contractor was attempting to back a full size ven out of a light area without a spotter.	Green Card. The crygen & exceletyne rack has bottles in the empty rack with no caps on them. For the stands they are the empty rack, they still need to have caps on them.	Green Card. Contractor tent truck running while he tooked for a valve.	Green Card. Truck driving with no haadlights, Location: Channel and Zylene Street	Green Card. Somebody was smoking in the portable outhouse.	Green Card I observed traffic not stopping at stop signs posted in parking lot
	NL-Lessons Learned	NL-Operational Process/Procedures - Safety Systems	NL- Equipment/Property Damage - General Liability	Businass Process	Equipment/Property Demage	NL- Equipment/Property Damage - General Debility	NL-Business Process - Business Interruption	Ntinjury/iliness - Contractor injury	NL-Lessons Learned	Nt-Lessons Learned	NL-Lessons Leamed	NL-Lessons Learned	NL-Lessons Learned
(1) Steam traps are left cold if not discovered by operators. The lists of cold traps are not resolved unless by work orders.	(1) No high level drain on the Trico offer-likely eversight when Trico installed., (2) SOS. Training & Procedures: High Oit Level in Bearing Housing, No overflow hole in TRICO after cup. Cup comes in willhout eversion hole from manufacturer. Not drilled on cup, Mitsed by maintenance when now elleufcup Installed., (3) SOS:Maintenance & Inspections: Stebar Issue: 220 Neutral Oif (Intentin dif) in mist oil could be contributing to higher clast level. SOS:Training & Procedures: Sidebar Issue: Operations & drivel thenify missing oil eventiow hole in TRICO eiler cup during routine plant/ equipment checks.	(1) The impact on the reliability of the SAAB reading was not known if the sponge oil was less than 3 ft. Existing procedure is technically right, however, it needs to improve the clarify te cover additional scenario.		(1) Tank design or the rundown system is not designed to handle the catelyst in the HCO undown from FCC, (2) Rundown system is not designed to handle catelyst in the rundown system to prevent build-up in T3216, (3) The tenk is not designed to handle on the HCO rundown from FCC.	(1) Driver gol too close to the TMIC badge reader post and did not maintained safe distance with the TMIC reader post.	(1) Did not follow Chevron Policy regarding JJSV, They assumed nothing bad would happen. communication of onlott button not addressed.	-						

	NL-Lessons Learned	Green Card. Overhead steam leek needs to be repaired. It makes a very toud notse and dangerous for workers.	Green Card. Overhead steam teak, Location: FCC - 30' North of P-105B	Zeer Coss	Closad	6/1/2011 1:00:00 PM	Richmond, CA - Refinery	21427
	NL-Lessons Learned	Grean Card. Working on E-1020, down wind we can small the oil burn on P- 105B.	Green Card. Odor of oil burning on P-105B. Location: FCC	Near	Clased	8/1/2011 2:45:00 PM	Richmond, CA - Refinery	21426
	NL-injuryillness - Employee injury	Green Card. Steam teak North of P-105-B is causing slippery surface on ground.	Green Card, Steam Leak. Location: FCC North of P- 105-B	Ngar Loss	Clased	8/1/2011 12:30:00 PM	Richmond CA - Refinery	21423
(1) SOS/Markenance & Inspection: BROKEN GATE ARM, Gate arm came in contact with passing vehicle. Gate arm came in contact with passing vehicle. Gate arm does not recognize passing vehicle. Does not reset limer to sillow vehicle to pass under arm. Markencioning system/equipment configuration. (2) Satebar Issues -Although the matfunctioning equipment caused the Issues -Although the matfunctioning equipment caused the Issues -Although the matfunctioning equipment caused the Issues -Although the matfunction passing vehicle, the employee if required to submit to injurisive lessing as the incident is considered a motor vehicle incident. There are costs replated to tell time waiting for personnel response to incident eito (one hour) and the costs of performing lests and sending out to lest aroutised elsb.	Equipment/Property	CVX EE was exiting the 31 gate security point with CVX vahida. EE swiped badge, and started to pull throughtunder guard crossing arm. Vehicle was approx. 12 through when arm started to come down. Arm stuck the top of vehicle, bearing the arm off. No damage was sustained to the vehicle. No trijuries were reported.	CVX EE had security gate arm come down on vehicle while leaving refinery.	Loss	Closed	9/8/2011 10:00:00 AM	Richmond, CA- Refinery	21418
(1) Lack of training on removal of PPE	injury/iliness	While culting pipe with a diamond blade saw contract employee accumulated dust on his face and in his hair. While removing his PPE employee (et an initiation to one of his eyes.	Rockfil area near 7 pump station	Less	Closed	9/7/2011 3:55:00 PM	Richmond, CA - Refinary	21373
(1) Lack of training on removal of PPE	NL-Injury/illness - Contractor injury	While cutting pipe with a diamond blade saw contract employee accumulated dust on his face and in his hair. While removing his PPE employee feit an irritation roone of his eyes.	Rockfill area near 7 pump stellon	Loss	Closed	9/7/2011 3:55:00 PM	Richmend, CA - Refinery	21373
(1) Employee got particle in eye and had to receive first aid. Why? Gust of whid blow particle in eye despite wearing proper PPE. Why? Natural phenomenon – dust/gust of wind	injuryfilness	Employes was performing a vessel closure at a Contactor in the Alty Pfant. Walked to north end or equipment to verify drawing information. Gust or whot picked up dust and blaw it into work area. Employee foll decomfort in right eye. Employee was wasning proper PPE (Spoggles) at the time of the knotent.	Employee got particle in the eye white conducting vessel closure.	Loss	Closed	9/7/2011 12:00:00 AM	Richmond, CA - Refriery	21363
	NL- Equipment/Property Damage - Equipment Damage	7 Boller tripped off-line dus to a faulty Woodward Governor. Started tack up and will remish I/S until 3 Boller is up and ruraling. 7 boller will then be taken O/S for Governor repaire.	7 Baller S/D - 9/7/11	Near Coss	Clused	9/7/2011 1:00:00 PM	Richmond, CA - Refnery	21348
(1) Employee did not follow agrass procedure, (2) Bottle watch did not verify that all supply valves were open before allowing the worker to enter the fant.	NILessons Leamed	In the process of cleaning T-3076 for its 20 year inspection, a contector entered the tank (confined spaces and fresh air) not knowing that the air supply to his regulation was not on. He proceeded into the tank with the air from the supply line only. Once he was 20 feet inside the tank he noticed that something was not right with his air. He turned anound and started waiting toward the entry marriery. He failed to turn on his egress pack. As he exited the tank he tost air and pulled his mask off.	entry into a contined space	Loss Coss	Closed	8/26/2011 2:00:00 PM	Richmond, CA - Rofney	21347
	NL-Lessons Learned	Grean Card, For approx, two weeks during August and now into September, the Hydro Maint, building water cooler has been troken and water thes been unavailable to maintenance personnel. We are asked to work in some pretty extreme conditions (high heat).	Green Card, Water cooler has been bisken, Leceton: Hydro Maint	Nagar Loss	Clased	9/7/2011 8:00:00 AM	Richmond, CA - Refinery	21332
(1) RI-803 delebase had not been updated for certain personnel moves.	NL-Business Process	Preparate (SC-1627 for permit to operate check for BAAQMD to arrive 98711. The new HES Manugar's DOA has not yet from storted over so Air Team to end suggested another Level 1 employee sign off on GO-1627, GO-1627 was propered, approved and submitted to not 1/17 Rush Desk on Fridey, S0211 for deskvery on 9871 four to deskvery on 9871 four to 600 for the check permitted on 971/17 but wanied to have the check permitted and a main from the AP Rush Desk stilling that they did not have the appropriate level of approval for the check person at the check person forwarded the person at the AP Rush Desk stilling that they did not have the appropriate developed. The supprover forwarded the semal to me and constabled the person at the AP Rush Desk was sent if because according to our internal DOA debases, the approver only he deck had a StAML DOPA. The Rush Desk provided a link to the DOA debases they use which is different than ours and when I tried to build not approved a same I got no resums.	Permit to Operate Check for DAACMD was not out in timely manner due to conflicting information for DOPA	Near Loss	Closed	98/2011 8:22:00 AM	Richmond, CA • Refinary	21331
(1) AC power was lost to (2) redundant Honeywell power supplying power to 24º field outputs, 2 fuses were found blown, (2) The current equipment configuration does provide glear indication that both power supplies are down.	NL-Business Process - Buciness Interruption	At approximately Jam on July 28th a Control Systems Analyst and a Maintenance Technician found both primary and secondary Honeywell HPM 24V rear power supplies down in Cabhest 9 located in Hydro Sties. Two Individual bases from 2 separatio USPs were blown resulting in the loss of AC power to both power supplies. The down power supplies supply 24V power to digital field devices.	Loss of TKC redundant Honeywell HPM power supplies	Near Loss	Closed	7/26/2011 12:00:00 AM	Richmond, CA - Refinery	21316
In most cases we only resolve the top 20% of those that are bad order.	Equipment/Property Damage	Power Plant. The force from the water hemmer shifted the fine approx. 3' off the Equipment/Proporty shoe's, Multiple stantion's sustained damage.	USE / 150# sleam water hammer stantion failer.	F039	Closed	2:30:00 PM	CA - 21253 Refinery	21253

Employee kyuy		_	ed Loss	PM Closed	Refinery	21503
NC-injury/iliness			Near	8/3/2011 4:30:00	Richmond, CA	
NL-Lessons Lsemed	playee not i Green Card An employee walking in confroi room algaing in and when he plasses. walked out of the confroi room and steried walking in the ural, I noticed he laconex wasn't wearing saidly glasses.	Green Card. Employee not wearing safety glesses. Localion: South Isomex	Near Loss	8/3/2011 9:30:00 AM Closed	Richmond, CA - Refinery	21502
NL-Lessons Learned		Green Card, Overgrown vegetation growth, Location: Channel Street	ed Loss	8/2/2011 1:30:00 PM Closed	Richmend, CA - Refinery	21500
№L-Lessons Leamed	splator not Location: Green Card Found 1/2 face respirator not properly stored.	Green Card. Respirator no property stored, Location: AV Gas/Rack	ed Loss	8/2/2011 8:30:00 AM Closed	Richmond, CA - Refinery	21498
Nt-Lessons Learned	mpany Green Card. Company cars are so dirty I could barely see cut the window to drive.	Green Card, Company cars are so dirty, Lecation: Refinery	ed Loss	8/2/2011 8:00:00 AM Closed	Richmond, CA - Refinery	21497
NL-injury/iliness - Employee injury	vestring ly dissess. Green Card. Not wearing herd het or safety glasses while driving fordilft.	Green Card. Not weering hard hat or safety glasses, Location: 0 Warehouse	ed Loss	8/2/2011 10:30:00 AM Closed	Richmand, CA - Refinery	21494
NL-injury/ilinasa Employae injury	×	Green Card, EE's did not have their hard hat on, Localion; D&R North of Control Room	ed Negr	8/2/2011 2:45:00 PM Closed	Richmand, CA - Refinery	21402
injury/lihess	nnood wer fenh while On September 6th, 2011 et approximately 13:20 hrs Wast Side Operator n on on Sc BA. SCBA was needed for fresh air job taking place on P-3359.	Operator experienced sharp pain to lower abdomine quadrant while attempting to don on SCBA	ed Loss	9/9/2011 1:19:00 PM Closed	Richmand, CA - Refinery	21451
NL-Lessons Learned	am teak. Green Card During a job welk i saw a big steam leak come out from 3/4" max steam line reak to V-500. Location: S. Isonax	Green Card. Steam teak. Location: S. Isomax	ed Loss	8/2/2011 9:30:00 AM Closed	Richmond, CA - Refinery	21446
MLessons Learned	afylone sure above C Boller Green Card, White hooking up acetylene gauge, I noticed the low pressure side was creeping above 15/5S). Location: Boller Shop	Green Card. Acetylone gauge tow pressure above 15PSI. Location: Baller Shop	ed Near	8/2/2011 6:30:00 AM Closed	Richmond, CA - Rellnery	21445
NL-Lessons Learned	-		Near Loss	8/2/2011 8:30:00 AM Closed	Richmond, CA - Refinery	21443
NL-Lessons Learned	td. d. Green Card. The sligh, Ammonia and Toulens Street, felt on the ground and it shall street pages to be put back up.	Green Card: Street sign fell on the ground. Location: Ammonia Street	Near Loss	8/2/2011 11:20:00 PM Closed	Richmond, i CA - Refinery	21442
NL-Lessons Learned	in. FCC - Green Card. Me and my partner were walking out of hot area of E-1020, taking 05B a short breek and walkin cool area when we found oil on the walkinesy.	Green Card, Olf in walkway, Localian: FCC 20' North of P-105B	Near Loss	8/1/2011 12:00:00 PM Closed	Richmond, 8 CA - 1 Refinery P	21441
NL-Lessons Learned		Green Card, Steam leak, Location: FCC - North side of E-102D	ed Loss	8/1/2011 12:10:00 Closed PM Closed	Richmond, CA Refinery	21430
NL-Lessons Learned	talking 4 St	Green Card, Man talking on his cell phone, Localion; Channel St	Near Loss	8/1/2011 6:45:00 AM Closed	Richmond, 8 CA - 6 Refinery A	21437
NL-Lessons Learned	10055 is Illon; FCC Green Card P-105B is leaking oil.	Green Card. P-1058 is leaking oil, Location: FCC	Near Loss	PM Closed 2:30:00 PM Closed	Richmond, CA - Refinery	21434
NL-injury/filness - Employee injury	zessive Green Card Excessive wood planks left inside vessel making a bipping hazard.		Near Loss	8/1/2011 12:00:00 PM Closed	Richmond, CA - Refinery	21433
NL-injury/lilnass - Contractor injury		Mausaa, Vomiting	Near Loss	9/8/2011 12:00:00 AM Closed	Richmond, CA - Refinery	21432
NL-Lessons Learned		Green Card. Contractor using cellphone. Lucation: Main Tank Field Road	Near Near	8/1/2011 4:10:00 Closed		21 429
NL-Lessons Learned	ooden It Location: Green Card After Amch I started to walk to my job again and do my LPSA and saw a wooden ladder in the unit.	Green Card. Wooden ladder in the unit, Location: FCC • V-220	Near Loss	8/1/2011 12:30:00 PM Closed	Richmond, CA - Refinery	21428

(1) Why did Engineer get Particle in his eye? Because, he looked up when the particle was falling down. Why? Natural Phenomenon - gravity/angle of head.	injury/liiness	Engineer was in the field looking at a job site where work would be performed at an elevated localion. When the Engineer tooked up, he felt a perticle in his eye Engineer tooked up, he felt a perticle in his eye Engineer was wearing prescription satisfy glasses.	Pertical in the right eye, removed by clinic	Loss	Closed	9/12/2011 10:00:00 AM	Richmond, CA - Refinery	21630
	peಟಜeಗ suosserin	Green Card. The 8 Plant Shuldown is here. We have a lot of foot traffic so we need a crosswalk to be repairted for us to use in the early moming.	Green Card, Need a crosswalk for shutdown traffic. Location: NV/ of Ammonia St on Xylene St	Ngar Loss	Closed	6/9/2011 5:45:00 AM	Richmond, CA - Refinery	21628
	NL-Lessons Learned	Green Card. A contractor delivery driver torget to put on hard het when unloading truck.	Green Card, Contractor not wearing herd het. Location: B&S TK3076	Near Near	Closed	8/9/2011 8:30:00 AM	Richmond, CA - Refinery	21625
	NC-Lessons Leamed	Green Card, I saw a trock running with no one in it.	Green Card. A truck running with no one in it. Location: By Timec Tool Room	Near	Closed	8/8/2011 11:05:00 AM_	Richmond, CA - Refinery	21623
	NC-Lessons Learned	Green Catd. An employee held up aboul 10 cars in the parking lot while he stopped and laked to equitor employee.	Green Card. Employee holding up treffic. Location: 91 Gate	Near Loss	Closed	6:46:00 AM	Richmond, CA Refinery	21621
(17) In 1999, dala acquiried during inspeciion found 16 7 MPY corrosion rate. This abnormal and accelerated corresions rate should have triggered a follow up in specials na said on current practices. However, the data was only logged and no follow up performed or information recorded regarding this accelerated corresion. (2) Not a Root Gause- A Broken Barrier. TEAM field techniciates made a judgment cell in the field applicat their company's policy. TEAMs policy requires that field technicians follow written procedures and shall not devise from them without TEAM engineering approvat., (3) Not a Root Gause- A broken barrier. OA/GC documents were not incolved once this TEAM composite wrap was installed. Current Chevron policy requires that all composite wrap was installed. Current Chevron policy requires that all composite wrap was installed. Current Chevron policy requires that all composite wrap as and best practices ware followed during installation., (4) Not a root cause or bottom barriers ware followed during installation. (4) Not a root cause or bottom barriers was unable to determine how for back the hydrogan grooting went as the varge film was unavailable to refew. Therefore, team could not propoint if current in special medical work of the barriers of the work of the proving in 100 or 2008. The leck of xay results also earnol tell plo nule out if the hydrogan grooting has been occurring since plant lated up in 1985 or 41 this was a recont phenomenon.	Business Process	EE performing end of shift rounds discovered a phihole leak on the fresh acid transfer line from V-1440 to the conflectors. The leak was tocated on the carbon stee section of the piping.	Leak on Frash acid supply line to contraders.	L'O93	Closed	9/1/2011 5/45:00	Richmond	21570
(\$) In 1939, data acquired during inspection found 16,7 MPV; cornsion rete. This shormest and accelerated correction rate should have triggered a follow up inspection based on current practices. However, the data was only togged and no follow up performed or information recorded regarding this accelerated correction. (2) Not a Roal Cause - A Broken Barrier. TEAM field technicisms made a judgment cell in the field against their company's policy. TEAMs policy requires that field technicisms follow written procedures and shall not devide from them without TEAM engineering approvat. (2) Not a Roal Cause. A broken barrier, QA/OG documents were not received once the TEAM composite wrap was installed. Current Chevror policy requires that all composite wraps and best practices were followed during installation, (4) Not a roal cause or broken barrier, Needs improvement investigation team was unable to determine how far back the hydrogen grooving went as they are find the growting through the proving a road of the proving the provin	Erwirormenia	EE parforming and of shift reunds discovered a physical teat on the fresh add transfer in a from V-1440 to the contactors. The feek was located on the carbon steel saction of the piping.	Leak on Frash acid supply	Loss	C Cosed	8/11/2011 6/45:00	Richmond, CA -	21570
	NL-Lessons Learned	Grean Card. An employee was talking on a cell phone while divining and he also didn't stop at a stop age.	Green Card. EE talking on cell phone while criving. Locallon: Toulene St.	Loss	Closed	8/3/2011 4:00:00 PM	Richmond, CA - Refinery	21606
	NL-injury/liness - Contractor fillury	Green Card. 2 vehicles parked close to Saeland trailer. Another vehicle going too last while passing between vehicles and trailer. People were standing near vehicle with door open.	Green Card. Vehicle passing too close. Location: Timec Field Office	Near Loss	Cfosed	8/3/2011 7:90:00 AN	Richmond, CA - Refinery	21505

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	21716	21713	21712	21711	21708	21685	21657	21857	21652	21652	21638	21637	21635	21633	21632	21631
	Richmend. CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinory	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmend, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Relinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery
	9/1/2011 1:30:00 PM	9/1/2011 6:30:00 AM	9/1/2011 10:30:00 AM	8/15/2011 8:00:00 AM	8/15/2011 8:00:00 AM	9/12/2011 10:00:00 AM	9/12/2011 11:30:00 AM	9/12/2011 11:30:00 AM	9/12/2011 9:00:00 AM	9/12/2011 8:00:00 AM	8/12/2011 12:10:00 PM	8/12/2011 7:00:00 AM	9/11/2011 4:30:00 PM	8/11/2011 5:00:00 AM	8/10/2011 8:00:00 AM	6:35:00 AM
	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
	Loss	Hear Loss	L Negr	Near	Near	Loss	Loss	Loss	Loss	Loss	Near Loss	Nagr Loss	Loss	Near Loss	Near	Hear
	Green Card. Semi truck and trailer traveling too fast. Location: RLP - Mill St. Curves	Green Card. Temporary stop sign has fell over. Location: 8 Warehouse	Green Card. Contractor used hendwash protable to wash his hends. Location: Bundle Pad, SW end	Green Card, Rental bottle cart almost dropped from truck. Location: TK 3076	Green Card, Crewingt trained properly, Lecation: 8&S T-3076	pinhole leak in the 12-3 wharf line	Contract employee noticed what looked like a bug bite on left wrist	Contract employee noticed what tooked like a bug bite on left wrist	T-3152 sample pump blow a oil seal	T-3152 sample pump blow a pil seal	Green Card. Truck crossed railroad tracks without stopping. Location: Channel St.	Green Card. No safety eye wash available. Location: The Ranch Wold Bay	Green Card. Replace the stop sign. Location: 91 Gale		Green Card. Contractor had no fall protection on. Location: 8 Warshouse	Green Card. Two cars parked the wrong way. Localion: 91 Gate
	Green Card. Noticed a semi truck and trailer traveling Ico fast. This is a 45mph zone. It is clearly posted.	Green Card. At the intersection of Main and Channel at 8 Vyarehouse, the tomporary stop sign has fell over.	Green Cord. Contractor used handwash portable to wash his hands.	Green Card. Ranial bottle cart almost dropped from fruck being unloaded because of small wheels and no breaks. Also top heavy and hard to move in gravel	Green Card. Grow is not trained properly on how to use breathing sir trailers. Not use to reinal cards.	Operator discovered a small amount of heavy oil in pipeway during his rounds. The reported his forcing to his HO and after investigating they found the 12-3 whard line weaping.	Bug bile on loft wrist	Bug bila on left wrist	during his rounds the Operator found less than 1/4 barrel of wavy oil under the sample pump at 17-3162	during his rounds the Operator found less then 1/4 barrel of waxy oil under the sample pump at T-3162	Green Cerd. I saw a truck turn to go into Alky-FCC and crossed the railroad tracks without stopping.	Green Card. We started filling out the hazard and was looking for the safety eye wash and there wasn't one available.	Green Card. The stop sign at 144 Xylene St. needs to be replaced. The paint is faded and carnot see the red.	Green Cord. A man driving a pickup the wrong way in the perking lot.	Green Card. A contractor performing work on equipment over 6 ft high had no fall protection on.	Green Card When I was walking looking for my coworkers, I saw two cers parked the wrong way.
	NL-injury/illnose - Confractor injury	NL-Lessons Learned	NL-Lessons Learned	Nt-Lassons Learned	NL-Løssons Learned	Envirormental	[njury/illness	NL-Injuny/ifiness - Contractor Injury	Environmental	ՒԼ-Environmenia! • Operationa! Leak	NL-Lessons Leamed	NL-Lessons Learned	NL-Lessons Learned	NL-Lessons Learned	NL-Injury/illness - Contractor injury	NL-Lessons Learned
(1) Several gallons of studge and wash water were spilled when residual liquid sprayed out of a cargo hose onto the task and the applied surface undersall the tank. The hose, which was being used to trastite the studge between tanks, was disconnected from the tank after it had been cleared of bulk liquids but white it was still under pressure. Pressure came from the compressed air used to clear the fine. The excess pressure had not been fully yearled per procedure outing the bleeder valve and remaining pressure was released airquight as the filter was disconnected. Whiteir cleimpd the thought pressure was fully released when he closed the bleeder valve Conduction reached is that worker's manner of security the procedure for clearing these and venting pressure had not been properly followed, but up to that point						(1) Pipe support was notched out, trapped water and soil to created the corrosion mechalism.	(1) Possibly insect was in glove	(1) Possibly insect was in playe	(1) Heat tracing and insulating flanges is not a standard practice	(1) Heat tracing and insulating flanges is not a standard practice						

	NL-Lessons Learned	Geen Card, When I was walking into Gale 91 this morning, I saw a flatbed truck stop on the other side hobling trefficup, picking up another employee. The strifficups heavy. The employee didn't slop and look when he ren across to catch the ride.	Green Card, Flatbed truck holding up traffic picking up a padestrian, Location: 91 Gate	Near Loss	Closed	Richmond, 8/16/2011 CA - 5:45:00 Refinery AM	Richmond, CA - Refinery	21810
	NŁ-Lessons Learned	Green Card. 118 Steam Line has a leak.	Green Card. 116 steam line has leak. Location: 8&S 116 Steam Line	Near	Closed	8/15/2011 8:30:00 AM	Richmond, CA - Refinery	21809
(1) Operator dat not check if the cambok ording was in place before connecting frethose. (2) SOS.Training & Procedures; Operator Was Sprayed With DEBRUIZE-WOP Water, Hoses Connection, Los Asked/Sprayed, No. 'O' Ring in Cam-loot Hose Connection, Los Add missing site to check for 'O' Ring, (1) SOS-Prepanal Protective Factors: Operator Did Not Check For Gasked. (4) Sobbar I esses; Training & Procedures (Information Resources): - Had the operator been sware that the 'O' Ring was missing, it is unclear where to get a replacement, especially all Odds, other than to write a work order for appropriate personnel (local room) to service the sample of the beach with the control of the spring the beach which of the carbon drums.	njuryillianns	Operator was sprayed with DEBRU/DEPKOP mix water while stillarpling to bedduch earbor drum in DEBRU/DEPKOP mix water process water that has 40,0PPM being an and DEWOP water is firewater. Potential exposure below PEL limits for benzene. The operator hoxed up firstores to exthout drum, cracked eyen water on the mixture of exthout drum, cracked eyen water on the fireflores to begin backtuch. After cracking open valve on drum DEBRU/ water leaked slightly out of camicox finehose connection. Operator continued task by opening ball valve despite leak. While opening ball valve, water sprayed out and tit the openinor's face and hands. The water spray was mostly flowater, but action was twen as if benzene from DEBRU/ water was present. Operator was wearing normal PEE_olives, hard hall, nomes, ear plugs, boots, and articly glasses. After indicate its plus of ign the armitok can leak. In the future the operator has agreed to check from best and camicok confession to operator with our use future in the service. If equilment is brokesumissing parts the operator will not use writing hand before the operator will not use writing hand placed to the operator will not use writing hand placed to the operator will not use writing hand placed to the operator will not use writing hand placed to the operator will not use writing hand placed to the operator will not use writing hand hand the operator will not use writing hand hand the operator will not use writing hand hand hand hand hand hand hand hand	Operator sprayed on lace and hands with DEBRUNDEWOP mx water	5 6 8	O 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9/14/2011 4:15,00	Richmond, CA - Refinery	21766
(1) Operator did not check if the cambock o-ring was in place before convecting firehose, (2) SOS: Training & Procedures; Operator Was Sprayed With DEBRUNDENCO P Water. Hose Connection LeakedSprayed, Mr. O'C Ring, (1) Comm foot Hose Connection. LeakedSprayed, Mr. O'C Ring, (2) Connection. Was supplied to the connection of the connection of the connection of the connection to the connection of the connecti	imployee isjury	Operator was sprayed with DEBRU/DEWOP mix water while attempting to backtush carbon drum in DEBRU. DEBRU water is process water that has so. SPPJL benzene and DEWOP water is firewater. Polenal accounts below FEL Imits for beazene. The operator hooked up firehose to carbon drum, cacked open review on drum their cracked open the ball water on the firehose to begin backtush. After cracking open valve on drum operator between the stightly out of camilock fischose comection. Operator continued last by opening ball valve despite leak. White opening ball valve water feased and It little operator's lace and trands. The water spray was mostly flewater, but action was taken as if borsone form DEBRU water was present Operator was weening normal PPE- gloves, hard hat, nomes, ear plugs, boots, and safely glasses. After incident STL and oparator reviewed job and found the carriacts or night as a green to check friences and cannock connection to ensure outpringent is fit for safelyes. If equipment is broken/missing parts the operator will not use until fixed/heptaced.	Operator sprayed on face and hands with DEBRUIDEWOP mx water		Closed	9/14/2011 4:15:00	Richmond, CA -	21788
	NL-Lessons Learned	At 11:04 A.M. P-3801 tidpped off line for no apparent reason, F-15:10 went to min fress. Operations responded and restarted @ 11:05 A.M. Catled Process control group and Electrical Analyst tio investigate.	P-1601 hipped off line.	Near	Closed	9/13/2011 11:04:00 AM	Richmond, CA - Refinery	21753
	NL-Lessons Learned	Green Card. Deck is rusted through al Northend of deck.	Green Card. Deck is rusled through, Location: D&R, Top Deck of V-1650	Near	Closed	9/7/2011 10:00:00 AM	Richmond, CA - Refinery	21731
	NL-Lessons Learned	Green Card. Steam leak near Column 130, Manifold leaking steam.	Green Card. Steam leek. Location: S. Isomax C-130	Near Loss	Closed	8/1/2011 2:00:00 PM	Richmend, CA - Refinery	21728
	NL-Lessons Learned	Green Card. We need a bench and a table to eat our lunch by the Timec Tool Room.	Green Card, Nead a bench/feble to eat cur funch. Location: Conex next to Timec Tool Room	Near Loss	Closed	9/1/2011 11:15:00 AM	Richmend, CA - Refinery	21727
	Nt-Lessons Learned	Green Card. An employee and a passenger in vehicle and did not have their seatbelt on.	Green Card, Employee did not have a seatbelt on, Location: FCC Convol Room Parking Lot	Noar	Closed	9/1/2011 10:55:00 AM	Richmond, CA - Refinery	21722
in his expanience had not resulted in significant pressure remaining in the hose, (2) Hydrocerbon-contielling lank bottoms studge sprayed a potable lank and the alphalt underneath the tink because a cargo hose was disconnected while sill under pressure. Material did not spray the worker opening the line, but it could have depending on the amount of liquid, the force of released pressure, and the location of the worker. The worker was not wearing a feas shield while he was performing the disconnection. The procedure PPE did not call for a face shield for the offsconnection. The procedure disconnection, but does not accommodate exita PPE needed the event has the operation bills to completely vent the line.	NL-Environmental -	After transfering studge between tanks in the Haz Waste Annox, contractor(s) failed to tilly dear and depressurize the portable cargo hose used for the transfer, Upon deconnecting the hose to connect and fill enother tank, approx. 2-3 gallons of tank studge was spilled from the hose to the secondary containment (esphalt).	Contractor spills 2-3 gallons of tank studies to secondary containment during transfer operation.	Near Logu	Closed	9/13/2011 11:00:00	Richmond CA - Refinery	21719

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(?) Water injection betow minimum nozzle turndown, (?) Stratified flow noglime resulted in liquid in the bettom of the tubes and vapor in the top of the tubes., (2) YFT/A not controlling your water temoval from VT17, equipment problem. May be understrated.	EquipmenVProperty Demage	Tube leek on E-711 fractionator overhead	Tube leak on E-71: fractionalor overhead	Loss	Closed	9/15/2011 12:09:00 AM	Richmond, CA - Refinery	21879	T
(1) in Feb 2011, V-451 was anlidipated to be at Best Prablico teading (8%) in Feb 2012, By July 2011, the 8% loading limit is projected to be mechanic in lett Nov 2011. The 18% loading medium softur isvels have increased in recent months (2) Rhanflower run lengths are confluring to be extanded as octare adjutements are levered. This provides fewer opportunities to investe This provides tever opportunities to line up V-451 changes to a region.	Nt-Business Process	V-451 Sulfur Sorber changeout was submitted as extra work to the 4Q11 shuldown V-451 was last changed during August 2010 (scope input for Hajor was June 2010), typical run lengths are 1.5-2 years between changeouts. This was enticipated to fine up with a 1Q12 Rhen regen. Sorber te tending quickor than expected & the Rhenformer run lengths have extended to 1+ years. This pushed the changeout to be requested as extra work.	V-451 Sulfur Sorber changeout was submitted as exit's work to the 4Q11 shuldown	Neer	Clased	7/21/2011 12:00:00 AM	Richmond, CA - Refinery	21866	Υ
(1) In the past, crews have seen that a 5-10F increase CAT has been sufficient to harotle changes to codd feed qualifies. There is a lack of experience in processing import feeds with qualifies has are different than normal 3s/c.	NL-Quality - Froduct Quality (int)	Switched DHT Codd feed from T-1482 to T-1483 at 13:00 91/2/2011, Meinteined cold feed rate of 10:MBD, raised CAT from 615 fin 6255 in anticipation of tank switch, by 16:X0, suitar ensyzer had trended up to 20:ppm and then DSL TA, was routed off-test. Conlinued firing CAT to 540F and reduced cold feed to 548DP, reduced back on test at 27:X6, Cold faed raises ware increased back to 10:MBD, causing several hours of off-test product later in the shift until cold feed was reduced again, Similar issues with cold feed several hours of 19:5/11.	Off-lest suffer in dieset product due to cold feed change	Near Coss	Closed	9/12/2011 4-40:00 PM	Richmond, CA - Refinery	21846	7
	NL-Lessons Learned	Green Card. Across street from scalehouse there is a bridge #145 with missing side guardrast on left side coming in from 31 Gets.	Green Card. Missing guard zail, Location; Scalehouse/31 Gate	Near Loss	Closed	8/24/2011 11:40:00 AM	Richmond, CA Refinery	21831	1
	NL-injury/litness -	Green Card, Multiple employees working at heights without fall protection or hard halfs.	Green Card, Empleyees without fall protection or herd hets. Location: Asphalt Plent StO Trakers	Locs Near	Clased	8/22/2011 8:30:00 AM	Richmond, CA - Refinery	21828	r
	NL-Lessons Learned	Graen Carc. Early in the morning a lot of workers weating dark clothing and trying to cross the street with a lot of treffic and we don't have a crosswalk to tel drivers know to stew down.	Green Card, Need a crosswalk, Location: Xylene Street	Near Loss	Clased	9/22/2011 5 50:00 AM	Richmond, CA - Refinery	21827	_
	Nt-Lessons Learned	Green Card, A van lrying to back out without a backup alarm and also didn't have a backup light.	Green Card. A van without a backup alarm. Location: FCC Control Reem	Near Loss	Closed	8/22/2011 2:15:00 PM	Richmond, CA - Refinery	21826	_
	NL-Lessons Learned	Geen Card. A gradali did not make a full stop at stop sign.	Green Cerd. A gradell did not make a full stop at stop sign. Location; Standard St crossing/railroad	COSS Negr	Crosed	8/22/2011 2:15:00 PM	Richmond CA - Refinery	21824	
	N1-Lessons Learned	Green Card. A truck is speeding up.	Green Card, A truck is speeding up. Location: Main SVReitroad	Near Loss	Closed	8/45:00 AM	Richmond, GA - Refinery	21823	
	NL-Lessons Learned	Green Card, Bridge 145 on comer of Xylane/Channel is missing some grading.	Green Card. Some grading is missing. Location: SW end of Bridge 145 on comer of Xylene St and Chennel St	Near Loss	Closed	8/19/2011 8:00:00 AM	Richmond, CA - Refinery	21821	
	NL-injury/lilnoss - Contractor Injury	Green Card, Four long scaffold plpss came unattached, rolling into the street. Traffic was moving slow, no one was hurt.	Green Card. Four long scaffold pipes came unatlached, Location; Channel St/reil tracks	Near	Closed	8/18/2011 9:00:00 AM	Richmond CA - Refriery	21819	
 (1) Inefficant logistics to get fresh sir equipment to jobsite in a timely manner 	Business Process	Fresh air equipment was not delivered to the jobsite in time to start the job. What had to be delayed until the following day.	Fresh oir equipment was not delivered to the job, delaying the job	Loss	Clased	9/7/2011 9:30:00 AM	Richmond, CA - Refinery	21817	1
	NL-Lessons Learned	Green Card. A security truck driving down Channel St. didn't have their headigits on.	Green Card, Truck didn't have their headights on, Location; Channet St.	Near Loss	CHOSEC	8/18/2011 0:35:00 AM	Richmond, CA - Resinery	21816	·
	NL-injury/iliness - Employee injury	Green Card, Found a pipe shoe sitting unsecured atop existing 20' high shucture. Pipe shee was not attached to or supported by anything.	Green Card, Found a pipe shoe sitting unsecured. Location: Asphall Plant	Near	Closed	. 0/10/2011 3:00:00 PM	Richmond, CA Refinery	21815	
	NL-Lessons Leamed	Green Card, Need to replace the stop sign at 144 Xylene St. The paint is lading away on old sign.	Green Card, Need to replace stop sign. Location: 144 Xylene St	Near Loss	Closed	6/15/2011 5:45:00 AM	Richmond CA - Refinery	21813	
	NL-Lessons Learned	Green Card. A large crans traveling without an escort. The crane was merging into an opcoming lane.	Green Card, A large crane traveling without an escort. Location: Channel St.	Near Loss	Clased	8/16/2011 6:00:00 AM	Richmond CA - Refinery	21812	
	NL-Lessons Learned	Green Card, When I got to the parking lot this morning, a black truck in back of me dight have their headights on.	Near have their headights on. Loss Location: 91 Gala	Near Loss	Closed	5:30:00 AM	CA - Refinery	21811	

	NL-Quality - Incorrect Product	While performing the PMI function the material (stem) did not met the specifications. Stem was supposed to be stakess steel 347, material was wrong alloy stainless steel 660	wrong stem was supposed to be 347 PMI at 660ss	Neer	Closed	9/14/2011 12:00:00 AM	Richmond, CA - Refinery	21998
(1) Employee scraped celf Why - employee slipped and celf cente into contact with pede on stationary bits. Why - employee silpped because they were turning and not fully concentrating on immediate task Why - employee trying to multi-task and left their attention wander Why - employee left under solf-imposed pressure to complete several tasks in short order.	Nt-injury/iliness - Employee injury		Employee scraped calf	Noer Coss	Closed	9/15/2011 12:00:00 PM	Richmond, CA - Refinery	21895
(1) Employee slipped and fell in caleteria. Why - employee was ruthing. Why - Employee fell pressure to compete task. Why - Perceived pressure was on part of employee (fell they had a lot to do)	Ntinjury≀iiness - Employee injury	Employee slipped and fell - bruised failbone	Employee slipped and fell	Near Loss	Closed	9/15/2011 12:00:00 PM	Richmend, CA - Refinery	21992
	NL-Operational Process/Procedures - Safety Systems	Channels sperating intermittently	Intermittant Redio	Near	Closed	9/15/2011 12:00:00 AM	Richmand, CA - Refinery	21943
	NtOperational Process/Procedures - Safety Systems	Weak control signalling between Trunking Controler and Channels causes intermittant behavior.	Signelling between Trunking system and Repeater channels intermittant	Near	Closed	9/12/2011 12:00:00 AM	Richmond, CA - Refinery	21941
	NL-Lessons Leerned	Green Card I went in front of E-1020 getting tools I saw an employee working with an impact gun without a faceshield on.	Green Card. Employee not wearing a facestiveid. Locallon: FCC, E-130	Near	Closed	8/25/2011 8:00:00 AM	Richmond, CA - Refinery	21936
(19) The strop procedure and guidence from the refinery Rolating Equipment Reliability seam has a torque vatue for the cover and not the john nut. Machinists apply oraque to the equipment bessed on feet, they do not want to over torque the equipment because it is cast malerials, (2) The design of fine unfocaters on K-1100A allows an operator to turn the valve unfocater; past the position where the pate valve is crosed and responsive to compressor processors and there is no way for operations to know when they have reached the desired position.	Environmentel	Upon arriving at the control room at shift change, operations smelled the strong oddor of process gas on the street when exting the ven. H2S and Chute link operators suited up and went out with a gas tester to the compressor area to find the lest. The gast set reter paged out when approaching the compressor area. The decision was made to shuf down the compressor and called Chevron fire to respond.	K-1100A lask on 2nd stage loader.	COS CO	Closed	9/15/2011 5:00.00 AM	Richmond, CA - Refinery	21929
(1) The shop procedure and guidence from the refinery Rotating Equipment Reliability learn has a longue value for the cover and not the jam out. Machinatis apply longue to the jam nut based on feet, they do not went to over longue the equipment because it is east materials, (2) The design of the unbeaders on K-1600A allows an operator to turn the valve unbeader past the position where the pitch survive is created and responsive to compressor pressures and there is no way for operators to know when they have reached the desired position.	Sensiëve/Commercial (Must be associated with another subtype)	Upon arriving at the control room at shift change, operations smelled the strong odor of process gas on the street when exiting the van. H2S and Chusé lutil operators suited up and went out with a gas tester to the compressor read to find the lack. The gas tester paged out when approaching the compressor street. The decision was made to shut down the compressor and called Chevron fire to respond.	K-1100A leak on 2nd slege loader.	Loss	Closed	9/15/2011 5.00:00 AN	Richmand, CA - Rafinery	21929
(1) The shop procedure and guidance from the refinery Rotating Equipment Reliability learn has a torque value for the cover and not the larn nut. Marchaists apply corque to the larn under the server and not the larn nut. Marchaists apply corque to the ign nut based on feet, they do not vent to over torque the equipment because it is cast materials. (2) The design of the unloader on K-1400A allows an operation to turn the valve unloader on K-1400A allows an operation to turn the valve unloader past the position where the plate surle is closed and responsive to compressor pressures and there is no way for operators to know when they have reached the desired position.	Equipment/Property Damage	Upon eniving at the control room at shift change, operations smelted the strong odor of process gas on the streat whan axing the van. H2S and Chude Unit operators suited up and went out with a gas lester to the compressor area to find the lest. The gast tester pagged out when approaching the compressor streat. The decident was made to shut down the compressor and called Chevron fire to respond.	K-1100A leak on 2nd slege loader.	Loss	Closed	9/15/2011 5:00:00 AM	Richmond, CA - Refinery	21929
(1) The shop procedure and guidance from the teffnery Rotating Equipment Reliability feam has a torque value for the cover and not the jam nut. Marchinists apply torque to the plan nut based on feet, they do not want to over torque the equipment because it is cast meliatial. (2) The design of the unfeeders on K-1100A allows an operator to furn the valve unfeeders as K-1100A allows an operator to furn the valve unfeeders as the position where the plate surje is doesnot and mesponitor to compressor pressures and there is no way for operators to know when they have reached the desired position.	Loss of Containment	Upon arriving at the control froom at shift change, operations sinelled the strong odor of process gas on the street when existing the van. H2S and Cnude Unit opprations suited up and warn cut with a gas tester to the compressor area to find the test. The gast tester pagged out when approaching the compressor area. The decident was made to attain down the compressor and called Chevron fine te respond.	K-1100A leak on 2nd slage leader.	Loss	Closed	9/16/2011 5:00:00 AM	Richmond, CA - Refinery	21929
(1) Water hijection below minimum nozzie turndown. (2) stratified flow regime resulted in liquid in the bottom of the lubes and varpor in the top of the tubes. (3) Y717A not controlling sour water removal from Y717, equipment problem. May be undersized.	Business Process	Tube leak on E-711 fractionstor overhead	Tube leak on E-711 fractionalor overhead	Loss	Closed	9/15/2011 12:09:00 AM	Richmond, CA - Refinery	21879

	NL-Lessons Learned	Green Card, Lerge Iruck at 8 Warehouse having problems backing out, Several cars creating a traffic jam.	d. Truck having scking out. Warehouse		Closed	8/31/2011 8:00:00 AM	Richmord, CA Referery	22202
	NL-Lessons Learned	Green Card, Three contractors walking toward unit with N2S alarms,	Green Card, Contractore walking lowerd unit with H2S alarms, Location; North Yerd	Near N	Closed	8/31/2011 9:00:00 AM	Richmord, CA · Refinery	22201
	Nt-Injury/Illness - Contractor Injury	Green Свис, Contractor wurkig on roottop without fell protection. Walking on Spatander:	Green Card, Contractor working without fail protection, Location; North Yard	Loss	Clased	8/31/2011 10:00:00 AM	Alchmord, CA - Refinery	22200
	Nt-injury/Illness - Contractor Injury	Green Card, Contractor working the new Hydrogen Project at the Y. Contractor using a leader plus standing on rootop without foil protection.	Green Card. Contractor using ledder without felt protection. Location: New Hydrogen Project	Loss L	Closed	ev31/2011 11:00:00 AM	Richmond, CA - Refinery	22199
(1) SOS; Dasign & Engineering; Cracked Refrectory, Refrectory is Not Very Floxible. Designed That Wely. (2) SOS; Maintenance & Inspection; No Survey to Check for Hot Spots., (3) SOS; Maintenance & Inspection; No Survey to Check for Hot Spots., (3) SOS; Mispelion Devices; Cracked Refrectory. Pacits Turned of Whôn Bolies is Not in Use Emissions Regulations, (4) SOS; Training & Procedures; Cracked Refrectory. Themmal Cycling of Solier, Bellines are Used Only When Neodod, Refinery Stem Load., (5) Sidebar Issues-Tube leaks at the rolled commoditions. Expansion and confrection due to thermal Cycling contributes to leaks.	NL- Equiptroni <i>Pro</i> perty Damage - Equipment Damage	TOP INVESTIGATION (SEE LINK FOR FULL TOP DESCRIPTION/ REPORT, INTIAL REPORT: While performing a walk through (PSSR) on neighboring 44 Birth oil spids were discovered on 88 Birth, both roth and south alles, approximately midway on the frebox. In at least one location the boiler wall had burned through completely. Operating normally on negative datk tept combustion contained within flebox.	Hot spats discovered on both the north and south sides of \$3 boller.	Near Coss	Ciosed	9/19/2011 3:00:00 PM	Richmord, CA - Refinery	22167
(1) To be identified after the pipe failure analysis , (2) To be identified after the pipe failure analysis	Erwironmente	Discovered leak 259 line on Petrolita Street	Leak 259 line	Loss	Clased	9/19/2011 8:00:00 AM	Richmond, CA - Refinery	22123
	NL-Quality - Product Unavailable	Ouring a planning session for the Pascagoula R&S Software upgreds, we were took that a critical pert required for the upgrade was being delayed so they ask if other Chevron site could bean them the required part for the upgrade until their order was received. Chevron Richronal went through the process of checking that inventory and found no such parts causing a bit process and this indicated that they had no spare pasts for their ourning CLM on hand.	CLM spare parts unavallable	Near (Ciosed	9/12/2011 12:00:00 FM	Richmord, CA - Refinery	22117
(1) Damaged or wrong tool for the Job. Mechanic thought that the tool was wom so he ground off the wom area and inted to remove the festener again.	ເກງີມເງ/iliness	Mechanic was in the process of replacing carbido inserts in a miling tool when the screwinver for the insert relativer slipped causing a cut on his hand.	Puncture wound to hand	Loss	Clased	9/15/2011 7:30:00 AM	Richmond, CA - Refinery	22075
(1) Condition of valve hand wheel extension (topse) accepted as normal, others in the area are in the same condition	injury/itness	While atterpting to open a 10" valve, B&S operator felt discombrit in his/her flower back. The valve is positioned approximately 4" from the ground. The operator libricated the valve before attempting to open it and used a porsuader.	White allempling to epen a 10" valve, B&S operator felt discomfort in his/her lower back.	Loss	Closed	9/18/2011 10:25:00 AM	Richmond, CA - Refinery	22054
(1) Undetermined specific source, TKN was in start up mode relief to V705 overwhelmed single FGR compressor before second compressor could be started.	NL-Environmental - Refease	AI ~ 1855 hts CO4 noticed flow increase to FGR compressors, called on radio to SISO & HISO operators to ask if anyone was going to relief. CO4 requested theis second FGR compressor K1070 be started, after a few minutes flow began to decrease.	Tripped FCC totalizer 9/17/11 @ 1852 hrs	Loss	Closed	9/17/2011 6:52:00 PM	Richmond, CA - Refinery	22045
(1) inadequate procedures, i.e., temparature monitoring for container containing potentially self heating material (2) inappropriate use of container, i.e. rol off bin, for potentially self heating material.	NL-Fire/Explosion	On 9/16/11 Contractor was transfering bin # 20180 from BSA to the Clean Habbus yard for pre-shipment. When he was putting the birn in place he protocod a strong odor from the bin and the bin was smoking from the back side. Another Technical immediately, took the temperature using the temperature by with 189 degrees C reading, He immediately notified his supervisor and was arbited to cell Partl Protection for assistance. Plant Protection arthe dand fooded this open him with water.	On 81581's Juan Medina was transporting a spent catelyst bin to the clean harbor yard and when he harbor yard and when he went to pleso the bin on the ground the notice that there was strake coming them was strake coming them back of the bin he notified Tina and Jose and Tinna summediatly get the temputative of the bin and saw that the temporesture was at 1 69 degrees and Tinna notified the supervisor Tinna notified the supervisor Tinna bin was and was lock to notify plant, and was fooded by plant propoedien.	Noar Loss	Closed	9/18/2011 5:30:300 PM	Richmond, CA - Rafinary	22030
(1) EE entered vahicle without following proper ergonomic techniques	injuryiliness	While getting back into a vehicle the EE folt a ling in their left knee.	EE strained knes	Logs	Closed	Richmand, 9/16/2011 CA - 6:05:00 Refinery PM		22030

https://impacterm.chevron.com/IMPACT/ANYWHERE/Reports/exports/scenario_159134_f8a5390b-1e90-4874-b012-4d17412a3a40.htm 8/9/2012

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Richmond, 8/29/2011	Richmond, CA Refinery		Richmond, CA - Refinery	Richmond, CA - Rafinsty	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinary	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA · Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery
8/29/2011	8/28/2011 6:30:00 AM	8/26/2011 4:00:00 PM	8/26/2011 9:30:00 AM	8/28/2011 1:55:00 PM	8/28/2011 7:30:00 AM	8/26/2011 2:00:00 PM	8/26/2011 6:30:00 AM	5:50:00 AM	8/25/2011 8:00:00 AM	9/15/2011 2:00:00 PM	8/31/2011 4:28:00 PM	8/31/2011 4:35.00 PM	8/31/2011 5 30:00 AM	8/31/2011 6:20:00 AM	8/31/2011 1:45:00 PM	8/31/2011 6:15:00 AM
	Closed	Closed	Cloped	Clased	Clased	Closed	Closed	Closed	Clased	Ciesed	Closed	Closed	Closed	Closed	Closed	Closed
	Loss	Near Loss	Loss	Loss Loss	Loss	Loss Near	Near	Logg Negr	S N	L OSS	L Neg	Coss T	Loss	Near Posg	Loss Loss	LOSS S
Green Card. The street sign needs to be	Green Card. Stop sign was laying down. Location: Comer of Mill & Main St.	Green Card. Contractor had no hard hat and safety glasses on. Location: FCC	Green Card. A plate ready to tall off of E-131A&B. Lecation: FCC	Green Card. Rope supporting a 2" pipe. Location: FCC	Green Caid. Street sign fell down on back road. Location: Ammonia & Tolune	Green Card. No slings used for rigging a come slong. Locallon: FCC	Green Card, Semi truck and trailer oriving with back doors loose. Location: RLP Loading Recks	Green Card. An emptyee didn't use crosswalk light. Location: Gate 91	Green Card. Employee not weering faceshield while using impact gun. Location: FCC E130	TIMEC welders wers tasked to wald on a code repair using a BFM weld procedure	Green Card. Employed driving too fast near crosswelk Localion; Pedestrian crosswelk by Newtrens	Green Card. Employee driving the wrong way. Location: Gate 91			Green Card. Employed Working on scaffold with no safely harmese. Location: FCC E-1023	Green Card, Traffic does not ses pedestrians crossing street, Location; 91 Gate
	Green Card. The slop sign was laying down. This is a portable sign supported by concrete in a bucket. High winds knocked it down.	Grean Card. A contractor in unit with no hard hat, no glasses and on cell phone.	इ	on the south side of E-102-B.		Green Cetd. There is a come stong holding a 6" insulated pipe. The come stong is over the birm hook and the chain is wrapped around insulation. No string to being used for rigging.		Green Cerd. An employee didn't use crosswelk light to walk across to the other side and he also was turning in the dark with dark coverate on.	Green Card. Employee not wearing a faceshield while using an impact gun.	TIMEC wolders were tasked to weld on a code repair using a BFM weld procedure	Green Cerd. Employee driving toward crosswalk going too fast, would not slow down before we crossed.	Green Card. When I was clocking out and walking to my car I saw an amployes driving out of the parking for the wrong way.	Green Cerd. Perfestion was walking out in front of vehicles in the crosswalk without hilling the button for fleshing light warning.	Green Card. Truck driving with headlights off. Too dark and a lot of pedestrians walking this time of morning.	Green Card, Empleyee werking on top of eceffold 12' high, yellow tag 100% lie offi, with no salely hamess in position.	Green Card. I crossed the street and a car went through and did not spot me. Location: 91 Gate
:	NL-Lessons Learned	NL-Injury/lihess - Contractor Injury	AL-Injury/liness - Employee Injury	NL-Lessons Learned	Nt-Lessons Learned	NL-Lessons Learned	NL-Lessons Learned	Nt-injury/liness - Employee injury	NL-krjury/itness - Employee injury	NL-Envirormental - Release	Nt-เกโทนักเกระ Emblokee เก็กวิจ	Nt-Lassons Learned	NL-tessons Learned	NL-Lessons Learned	NC-injury/iliness - Employae ให้นาง	Nt-Lessons Learned
										(1) a. Lack of understanding, training, and guidance with in DED what repairs are considered code repairs with original equipment. (2) it. Lack of understanding and training within the Planning and Scheduling group with the denils of weld procedures and who can use them. (3) c. Nothing in Planner and exheculer process to chook that the wald procedure is appropriate for the personnel welding. Personnel doing work and the weld inspectors are provided with the work package.						

CUSA-CSB-0000105 EPA

AN 821/2011 130,00 130,00 1 7.30.00 1.000 1.000 280 60 A 2000 970701 8.43.00 PN 970/2011 1:40:00 AM 2 Closed 500 Loss of Kill All Compressors of the March 1994 of the Compressors of the March 1994 of the Green March 1994 of the March New Cond Fod holes all New County for mad on Storo Less Bd.

Green Card, An emphysies New County for Card, An emphysies New County Fod Card, Constitution For Card, Ca DZS CEF Cambellian
Fiber misch was not lent to all
Loss groups
Traumer tent T-3128 to
Near 3197 went to T-1604
Loss lesseet of T-3107 Intell Jentichand Lockhan.

Gener Card. Thomas 61. drinklight of the high phomograph and to be letter 50 section by

Green Card. Expensed.

Green Card. Expensed Hear H-3008 HTQ compressor Less S/D Cristyres reading sociation for the process of breaking a 10 feet bog. That been when one sord or he beard contented and scenarious his check as it broke and of he beard contented and scenarious his check as it broke. I represe from 15/258 IT 15/257 went It 11/254 resists of 15/257 common to the common the common terms of 9/21 CSF cancellation nelsew was not swit and therefore was not movined by couldn't objects, and stong the cateforia. There were about 10 peocle who showed that were not notified, Green Card, Contractor driving foriott with seathell harging to the street, Leich was bit innon seathell. Green Card. Politides at Virough the road on Shop Rd Given Card. Stop eigh down at Zerolene and Mrt St. The who blew it down. en Card. An employee d'étil have a look on his look bex. Nt.-Operational
Procesus-Procedures
Plant Run Out/Slow
Down Plani Run OLUSow Down Nu-lejury/illneass -Contractor hyury NL-Operatoral
Processaffrecesture At - Injury filling as -Employee lejury NE-Laterons Cearned NL Lessons Learred AL-Business Process (1) Valve was not fully closed KL-Lassons Learned NL-La pacos Learred 100mg [4977bd (1) New CSF Chak presumed the CSF Committe week in Owing of thoughing contractor. CSF strenders and the committee in making contractor. CSF strenders death as the committee in making the cSF stam was locused on the send of the committee in the CSF stam was locused on the send of the CSF stam was locused on the send of the SSF parking cSF stam was locused on the send of the SSF parking cSF stam was locused on the send of the SSF parking cSF stam was locused on the send of the send months campolitation. (1) Employee set Nesself at the size of fee while breaking scare locates when Employee as set portations fee task in a fee manner in he had said in the pass with no negative scares when the had said in the pass with no negative scares when the second than the sequenced and made social with this loca. 1) K-XXXB U/O pump tripped

Page 100 of 234

22588	22586	22586	22583	22572	22569	22657	22498
Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Rehmond,	Richmond, CA - Retinary	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery
9/25/2011 8:50:00	9/20/2011 1:00:00 PM	9/20/2011 1:00:00 PM	7/15/2011 112/20:00	9/23/2011 10:00:00 AM	9/19/2011 8:00:00 AM	9/26/2011 3:28:00 AM	9/24/2011 9-00:00 AM
0	Closed	Closed	Cosed	Closed	Closed	Closed	Closed
Loas	Loss Near	Loss Vest	loss	Neer	Loss	Loss	Near
Tetramer spilled to the bay from the botter maker flange after disconeciding hose from ship.	T-3126 notice of return to service was not completed and will require delay in putting tank in service.	T-3126 notice of return to service was not completed and will require delay in putting tank in service.	Recycle of Stock Balances for 2012-2013 Susiness	D&R lab	10": Wash ell pipeline detected hydrocarbon smell (Diesel) in the steeve	Crude feed cut after tank switch. Hit by light meterial and foaming in the flash drum.	Operator had checst pains and breathing issues.
Around 05.50 after loading 21.9MB of tetramer to the Chomburk Lindy Arce was completed. The Loading hose was emptied and boiler maker was installed. Curing the process of riging the hose out, about 1 gat (max) spited to the boy from the boiler maker flance.	1-3125 notice of return to service was not completed and will require delay in putting tens in service.	T-3126 notice of return to service was not completed and will require delay in putting tank in service.	Description of What Occurred The 2012 and 2013 Richmond Refinery Slock Balancus sequities regreting to be to inaccuste date entry for the two ill incidentification and the pair omodel (LP). Key Factors Conhibuting to the Event 1) Pritos mapping for five to be an archarded at the Event 1) Pritos mapping for five to the an activating state that the pair of the pair	Working all a lab bench, I noticed broken glass on the bench top that had been left there.	Detected tydrocarbon smell in the sleave of the 10" wash oil pipaline during a rehaspection. No hydrocarbon liquid was observed lending out of the sleave.	After taking a tank switch (@ 0200) from Tk-3105 to Tk-3107 @ 0328, the crude unit got hit with light material the P-1102's gassed up and were cavilsting. Feed was cut to 175 MBPD due to foaming in the flash drum.	Operator has cheest pains end breathing issues. He said the had a appointment at his doctor at 11:00am for this issue. Concern if he was able to drive to appointment. Plant protection took his vitals and said he was able to drive to the hospital to see his doctor.
Environmental	NL-Regulatory Compliance - Non Compliance - Air	Nt-Quality - Paperwork Incorrect/Not Sent	Butiness Process	Nt-tojuryilinese - Contractor injury	NL-Environmental - Operational Leak	Operational Process/Procedures	NL-injury/iliness - RSI/MSD Discomfort
(1) I nadequate procedure - procedure exists and is technically fight. However, it needs to be improved, (2) hadequate procedure - a deficiency in the equality check or inspection of work ceused a problem to be missed., (3) inadequate procedure - vessed OA/OC is test than adoquate to deficiency in the quality check or inspection of work caused a noblem to be missed.	(1) The Tenk turneround group was not awere that this was a MACT lank and that it had a 30 day notification requirement.	(1) The Tank turnaround group was not aware that this was a MACT lank and that it had a 30 day notification requirement.	(1) Price mapping was incorrect because a) The Richmond price transfer template is a complex spreadsheel with no assigned stoward to maintarbuydate the template. A stoward has not been defined because i) Sidebat — as part of defining stevandship and accompanying work process, examine if corporate price model updates are communicated to all the light stakeholders. (2) A new LP generate was used for the LRQP because a) The model levelwy process is not sufficiently robust glinen the desire to have new paramets assigned to the LRQP because b) Existing work process does adequately define expeciations for what constitutes a model grade b) The model is not vertised by other users assigned to the LRQP because b) Existing work process does adequately define expeciations for what constitutes a model ferview b) The new LP for LRQP bia a business linkage with the aborter area planning process. As solution is required on this item office to have the most up to date to have she most up to date to due to the solutions with mighate the risk. (3) The support provided and office required to the solutions with mighate the risk. (3) The support provided and for the new LP pleanner wasn't sufficient because a) The normal planner funover, which historically bridges this rise, diversity and conditions existed and the new solutions work process.—abnormal conditions existed and the new since togolizeds. (4) The LRQP planner was one bearded late into the planning cycle because a) This position was not secondates an applied to cover all permonals of the secondate and distance and ideas applied to cover all positions. This was a business officers of the results of the secondate and the first attempt we are not secondated.			(1) Light products in feed causing foaming, (2) vortex breaker damaged	

22040	22842	22843	22729	22721	22719	22710	22705	22703	22702	22700	22694	22692	22662	2282	22619	22617	22614
Champay	Richmond,	Richmond, CA - Relinory	Richmend, CA - Refinery	CA - CA - Refinery	_		Richmand, CA - Refinery	CA - Refinery		Richmond CA - Rafinery	Richmond, CA - Refinery	Kichmond CA - 2 Refinery	Richmond CA - Refinery	Richmond, CA. 22622 Refinery	Richmond, CA - 19 Refinery	Richmond, CA - 17 Refinery	
רמ	9/28/2011 9:10:00	9/28/2011 9 10.00 PM	9/27/2011 12:00:00 AM				9/14/2011 5:30:00 AM	9:00:00 AM		9/13/2011 10:00:00 AM	9/8/2011 5/50:00 AM	9/8/2011 6:45:00 AM	, 9/27/2011 7:45:00 AM	. 9/26/2011 2:00:00 PM	1. 9/7/2011 7:30:00 AM	1,30:00 PM	AM 6:30:00
Closed		Closed	Closed	Clased	Ciosad	Closed	Cinsed	Closad	Closed	Clased	Closed	Closed	Closed	Closed	Closed	Closed	Closed
ross Coss		ios L	C 26.	Near Loss	Near Loss	Neer Loss	Loss	Logs Logs	Near Less	Loss	Near	Near	Noar Loss	Near Loss	Near	Near Loss	Loss
P-126C blown OB seaf		P-126C Hown OB seal	Bee Sting	Green Card, Wind sock needs replacing, Localion: B&S TK-3197	Green Card, Wind sock needs replacing, Location; B&S TX 397 Pole Yard	Green Card. Van came around the corner speeding, Location: Behind the Boiler Shop	Green Card, Bench outside of classroom needs repair, Location; \$1 Gate	Green Card. Wind sock needs replacing Location: B&S TK-399 Pole Yards	Green Card, Scaffolding lag dein't have anything written in precaution area. Location: D&R near DHT	Green Card, Sleam tracing leak on E-1020, Location; FCC E-102D	Green Card, We need a crosswalk to be painted. Location: Xylene St.	Green Card. Gel crosswalk repaining with reflectors. Location: Gale 91	Employee slipped - did not	iliness not work related	Green Card, Grading is missing on bridge, Location: Xylane St/Channel St	Green Card. Steam trap leaking, Location: S. Isomex - East of C-130	91 Gale
	INITIAL DESCRIPTION: SEE LINK ATTACHED IN INVESTIGATION FOR COMPLETE TOP REPORT, at ~ 21:0 line 7-1260. OB seal falleg and started teating printy bad Plant Prolection was called out to startby white opportunity and the printy printy bad which was competed safely and without further to the printy of the printy	MITIAL DESCRIPTION: SEE LINK ATTACHED IN INVESTIGATION FOR COMPLETE TOP HEPORT, at ~ 21:10 INS P~2020. OB seal littled and statted backing prety bed. Flart Projection was called out to standy write operations is salated the pump. All of which was completed safety and without further incident.			Green Card, Wind sock needs replacing.		Green Card, Bench outside of dessroom coming apart. Probably weuld not support much weight or mercement.	Green Carc. Wind sock needs replacing at TK-355 Pole Yard.	Green Cerd. While conducting an audit, noticed scaffolding lag on #7275151 didn't have enything written in "precautions" area.	Green Card. The steam tracing leak on E-102D needs to be fixed because it teaks on eye teval and also near walkway. Someone can get burned if the leak desant get fixed soon.	Green Card. Who need a crosswalk to be painloof. Lots of workers walk through here end cross the street in the morning.	Green Card. Get crosswalk repenied with reflectors before someone gets hit by a vehicle.	Employee frod wrong on sleps cut of 214 Main side entrence. Their fool slipped, but they did not fall . 3 points of contact (hand in hover pealton).	All approximately 2 pm leday an Overse worker compleined that he was not pating yet to the Overse safety professional. The Overse safety professional, the Overse safety professional, who is allowase EMT, determined that these was not an entergency, Bocause the employee should be itseen to the Chevron Refinery Medical Sankvass as part of the charged the profession prior to sensing the employee hords. The Chavron Refinery Medical Services should not be smithly the employee and and it was determined to be approximately the charged the charge that the charged the char	Green Card. Bridge 145 on comer of Xylene St and Channel St some greding is missing on SW end of bridge.	Green Card. Steam trap teaking East of C-130	Green Card. In the morning every 20 cars get searched. It's a near miss every morning while backing up bolveon traffic to get your vehicle searched.
Operational Leak	NiEnvironmental -	Equipment/Property Demage	NL-InjuryAitness - Contractor injury	NL-Lessons Learner	NL-Lessons Learned	NL-knjury/lihass - Employee injury	NL-Lessons Learned	Dames stosses-1N	NL-Lessons Leamad	NL-Lessons Learned	NL-Lessons Learned	NL-Lessons Learned	NL-Muylliness -	ML-Inkry/Illness -	Nt-Lessona Leamed	NL-Lessons Learned	NL-Lessons Learned
(1) Unable to Determine Cause of Leak		(1) Unable to Determine Cause of Look															

			1				<u> </u>
	29111	23111	23103	23078	22928	22915	22876
	Richmond, CA - 23111 Resney	Richmond, CA- 23111 Refinery	Richmend, CA - Refinery	Richmend, CA - Refnery	Richmend, CA - Refinery	Richmond, CA - Refinery	Richmond, GA - Refinery
	103/2011 3:30:00 AM	1073/2011 3:30:00 AM	10/2/2011 10:00:00 AM	10/1/2011 10/00:00	9/29/2011 5:40:00 AM	9/28/2011 1:00:00 PM	9/28/2011 8:30:00 AM
	Cics	Closed	Closed	Closed	Closed	Closed	Clared
	C 03 0	C 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Near	Loss	C N N N N N N N N N N N N N N N N N N N	Near	[6
Employee was using a 7/16" wrench to attach	Tube cubure in F-1550	Tube rupture in F-1550	P-128C flange lask on U/S Near discharge flange of the Less discharge EBV	Operator injures lower back while fitting en inspection hatch.	Green Card, Poor lighting for crosswalks, Location: Charnel St.	Green Card. Wasp nest found in housing of P-24. Location: 21 Pump Pad	2 confirmed outside oder complaints 9/28/11
On September 2 1st 2011, Chavron electrician was working at the K-242 of Electrical BUSS re-ellaching leads when the noticed some pain in his pain of the right hand around his middle finger even. He stated their has had that the pain before white working with books and that it went away but by the end of the shift it was still bothering him so his came in to me and reported the pain. I asked him to report to the clinic in the monting and have it evaluated which he did. He reported to the clinic in the monting and have the employee the buprofin the was returned to work with no restrictions that day (9/22/11) and was told to	Area operator reported black smoke venting from F-1551 stack at -0320. OWS insignanted and worked to un-pas F-1550. Area operator redired that it it was coming from F-1550 box. HO/STI and crew responded and found liquid etipping from burn box (reariest HPCC hoxes) and ligited who flames. GFD notified, HO instructed OWS 5 to remove pressure and flow to F-1550. Provided F-1550 box valves were closed. Plant evac was activated. HO upon inspected F-1550 box reported seeing flame from floot to calling. Crew wrate the error and F-16 mentior wine placed (two) on F-1550. HO upon inspected F-1550 box reported seeing flame from floot to calling. One where I mention of the mentior wine placed (two) on F-1550. HO upon this package of procedures for tube nuplate which required all homeous on that bank to be shuldown. STL met with RLS and decided to shuldown LNC and HNC hot stip. GFD placed monitor from ledder ruck onto F-1550. CFD and HNC hot stip. GFD placed monitor from ledder ruck onto F-1550. CFD	Area operator reported black smoke vanishg from F-1651 stack at -0320 OWS responded and worked to unjeas F-1650. Area operator redired that fire was coming from F-1550 box. HO/STI and crew responded and found liquid dripping from burn box (featest HPCC house) and ignited mol itemas. CPD notified, HO instructed OWS to bramove pressure and flow to F-1550. Chopper valve and 50 foot block valves were closed. Plant ever was scholard. HO upon inspected F-1550 box reported stesing flame from floor to ceiling. Crew evers to the area and Fire monitor were placed (flwo) on F-1550. HO reviewed emergency procedures for tuber rupture which required all funness on that bank to be studiedness. TL mat with RLS and decided to shuddown INC and HNO hot ship. CFD placed monitor from ladder truck onto F-1550. CFD Locali fire out at 0425.	1	An EOD operator was in the process of removing a "seal mat" from a hatch for one of the efficient sewers and in the process strained their lower back.	Green Card. I was driving in from Gale 91 lowards Cont. Maint, As I approached the crosswalk all the Indige, I noticed a padestrian all the last minute. Lighting was very poor, If he hadry slopped or if I wasn't paying effection; there could have easily been an incident.	Green Card. Wasp nest found in housing of P-24.	complaint was called in to leh SY Environmental Coordinator, 8:30 am. Complaint was called in to leh SY Environmental Coordinator, 8:30 am. Complainant at 8:40 and tecod odd to Mits and Castro. The wind direction from the time of the initial cast (8:30 a.m.) was out of the NNAV (345.3) with wind speeds at approximately 7.5 mpb. The ambient lemporature was approximately 87.F. CFRE was notified at 9:10 and dispatched units around the Refinery perimeter and in the Polint - observing no colors; 10:20 am. Complainant described an phindeum and burn oil odd. Linds a gelin met with the complainant lescribed in the control of the hitsi cast (10:20 am.) was out of the NAVY (345) with wind speeds at approximately 7.40 mph. The embient temperature was approximately 9.1-40 mph. The approximately 11:40 and dispatched units around the Refinery perimeter and in the Polint - observing no colors. RTC had no issues to report. The wind was coming directly from the north.
	F ire/Explosion	Loss of Containment	NL-Environmenial - Rejease	Injury/iliness	NL-Injuryiliness - Employee hjury	NL-Lassons Learned	Environmental
	(1) The Retroactive PMI program did not include refinery furnace inspections. PMI had never been conducted on the entire furnace to discover the carbon sizel ethows because they were considered for risk (low probability of error). (2) HNC unit feed rates were increased by 30% in recent years appear inspection history may have been insufficient to predict future corrosion.	(1) The Retronctive PAII program did not include refinery furnace inspections. PAII had never been conducted on the errite furnace to discover the centron steel elbow because they were considered bur nist (low probability of enrol., (2) HNC unit lead rates were increased by 30% in recent years so prior inspection history may have been insufficient to predict buture corresion.	(1) Sidebar SOS: Personal Prolictive Fectors: Not enough to questions on betisflenge, impact gen used to tighten bots rather than Hylorc wrench (to provide required toque). Mechanics decide not to wait and use a Hylorc wranch.Gasske twas not replaced as direded on the work order. Mechanics decided to by to tighten up on the flange and see if think would stop then lack without opening it. Tightening up had worked in the past.	(1) While performing task, used improper body positioning. (2) SOS:Design & Engineering: Mat had athered to hatch, Heat of the day caused mat to become sticky/ tacky. Possibility for mats becoming stuck: was unknown to Management when ordered; (3) SOS: Traking & Procedures: Information Resources: Heat of the day caused mat to become sticky/ tacky, Mats changing condition due to exposure to not embient temperature was not evident.			(1) Chevron is no longer immediately contacted nor do we get GFRE on site ASAP to confirm odors. This teads to a lack of odor to detect and help assess the actual odor. All octor compliants must be called into CFRE immediately to ansure they have as munch time as possible to respond and assess. (2) The Coorant is routherly taken out of service in parts of the manifed so contractors do not have to work in the mist. Contractors think it might be harmful and is an annoyence.

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	23206	23244	23244	23238	23238	23232	23194	23167	23116	23110
Richmond, 10/5/2011	Richmond, CA - Refreny	Richmond, CA- Refriery	Richmond, CA -	Richmond, CA - Refreny	Richmond, CA- Refrieny	Richmond, CA - Refnery	Richmond, CA - 23194 Rernery	Richmond, CA - Refnery	Richmond, CA - Refinery	Richmond, CA - Refinery
10/5/2011	10/5/2011 2:20 00 AM	104/2011 7/32.00	104/2011 7:32.00	10/4/2011 2:45.00 PM	10/4/2011 2:45 00 PM	10/4/2011 12:00:00 AM	10/3/2011 7:20:00 PM	10/1/2011 1:00:00 PM	9/21/2011 3:00:00	9/21/2011 3:00:00 PM
	Cloned	Closed	Ciased	Closed	Closed	Clased	Closed	Closed	Cios ed	Clased
	Neer Loca	Loss	Los s	LOSS:	Near Loss	Loss	Near Loss	Loss	Loss	(F)
	#2 Separator Flow Spilltor Overflowed due to heavy rain	RLOP Flaring due to Shuddown Cleanup	RLOP Flating due to Shuldown cleanup	A contractor truck came into contract with a light fixture	A contractor truck came into contact with a right fadure		SRU 3 train shuddown trip	Green Card, Truck box broke open the fallgate, Location: D&R gree	Employee was using a 7/16 weekel to alloat load and the loads to a BUSS bar when they noted a strained feeling in their light palm, middle finger area.	leads to a BUSS bar when they noticed a strained feeting in their right paim, middle finger area.
Chevron employee lett swelling underneath their eye. Employee taken to the	2.0	During the RLOP shudown deamup process, line Flare Gas compressors studion valve temperatures increased due to the steamout process. It was precessary to take RLOP off FGR to avoid valve damage to the compressors.	Ouring the RLOP shutdown deamup process, the Flate Gas compressors suction valve temperatures increased due to the steamus process. It was necessary to take RLOP of FGR to avoid valve damage to the compressors.	The load on the back of a contractor truck came in contact with a light fixture on a pipaway toad. The driver reversed course avoiding damage to conduit and possible further problems.	The load on the back of a contractor truck earns in contact with a light fixture on a pipeway road. The driver reversed course avciding damage to conduit and possible further problems.	Contract employee received hispect bite while putting on his coveralis.	While performing the SRU train "Hot strip" procedure SRUNP3600, the natural gas to the thermal exidezer was blocked in. Thus Lipping the "fre-eye" and creating a plain tip. No effect to upstream units as it was planned to pul feed from SRU #3 at that point.	Green Carc. From a complete stop, leaving D&R going onto Channal Street, (I believe that's the street, backford or D&R) we drove up the filte hit and our ruck box broke open the teligate and dropped all our tools onto read.	On September 21st 2011, Chevron electrican was working at the k-242 Electrical DUSG re-alloching leads when he neticed some pain in his path of the right hand around the middle finger area. He stated that he had had this pain before while working with tools and heal it was not before while working with tools and heal it was all beheing him so the came in lone and reported the pein. I he shift it was suil beheing him so the came in lone and reported the pein. I he should which he six he had not be care to be came to lone and reported the pein. Be so the health of the house precidence which he six he reported to the care to a 122/11 a 18:15 AM and was seen by the nurse precidence who had he had a set that the care to the care to a 122/11 and was to do check in egain or 325/11 for left low-up. On \$29/11 he was soon again by to chand to online a feessing the same hand. Empoyee was returned to work with no restrictions that day.	chack in again on 8/78/11 for follow up. On 8/78/11 he was seen again by bewn at the clinic and was given les end more ibuprofin and told to allernate urage of hands to rollows steering the same hand. Empoyee was returned to work with no restrictions same day.
	NL-Environmentai - Roleaso	Environrental	Regulatory Compliance	NL- Equipment/Property Damage - Equipment Damage	NL-Transponation - Contractor	sseujii/unifuj	ML-Lessons Learned	NL-injury/Illness • Employee injury	isjury/linass	NL-injury/আনতঃs - Employae injury
- PATAMAKAN		(1) There was a positive deviation from the RLOP flare plan (less flaring than planned) - The tool for estimating the planned distributing the planned distribution to the possibly over-estimates the Hydrogen Suffed (P-25) content of key vessels, in perfective these vessels include the LNC & HNC Amospheric and Vecaum Distillation columns as well as the LNC & HNC reactor toops, (2) Those was a positive deviation from the RLOP flare plan (less flaring than planned) - Z. A temporary steam condensor was installed as RLOP's Gas Recovery Unit to first the flow of gas to the relief system. This worked as intended to limit the nonunit of floring and to allow the RLOP plants to be put back on to the Flare Gas Recovery y steam.	(1) There was a positive deviation from the RLOP flare plan (less flaring than planned) - The tool for estimating the planned flaring volumes is reasonably accurate, but possibly over-satimates the Hydrogen Suffee (PI2S) content of key vessels. In perfocular these vessels include the LNC at HYC Amospheric and Vacuum Distillation columns as well as the LNC at HYC reactor loops, (2) There was a positive deviation from the RLOP flare plan (less flaring than planned) - 2. An imporany steam condenser was installed at RLOP Gas Recovery Ukt to Irial the flav of gas to the relief system. This worked as intended to limit the amount of faring and to allow the RLOP plants to be put back on to the Flare Gas Recovery y system.	2		(1) enviromental / outside conditions	(1) SOS:Misgation Device: Plant Trip. No natural gas going to the furnace. Blocked in wrong line, Operator trought they had deced the corned valve. No labed on the Velvo. Unable to see label on line. Label was facted. (2) SOS: Training & Procedures: Operator thought they had closed the cornect valve. Did not review plant dilagrants.		Φ	(1)

6 g O D < D > (a		Green Cand. Steam line 102" pere leading. Localitor. Green Card. As I was waiking up to the top deck I saw a steam line 1/2" pipe 112" pere leading. Localitor. Green Card. As I was waiking up to the top deck I saw a steam line 1/2" pipe NILessons Learned	Green Card. Studs on Iresh eir Spack too close to Green Card. Fresh eir Spack sluds are 3" from the ground, too close to ground. NL-Lessons Learned K242	Green Card, Handrall broken	Green Card. Poor lighting. Green Card. We need more light on Xylene St by Storohouse so drivers can Locabion. Xylene St by see evokens who need to cross the street. It's herd to see working with their Nt-Lessons Learned	 d on 7" grinder.	Graen Card, Burner (Ip in wrong position, Location: D&R - F-570 Green Card, Discovered one burner (Ip in wrong position, NL-Lessons Learned	- 1	ter employee but a pickup truck in't have a crosswalk	Green Card Found orfice plate in backwards. Location: DBR F-560 Green Card. Found orfice plate in backwards. NI-Lessons Learned	doyee walking wearing	Groon Card. Tell weeds on the NIP north of contractors. NI-Lessons Learned or Cross Card. Tell weeds on the NIP north of contractors.	Green Card, Poor lighting Green Card, I was told by security to park in the northside parking lot at the Nate and no cosswalk. I oran for the property of the	เก่ากระเ	Small Scratch to Right Workship say on the south and of Markeling Area, a plece of the steet blade's NL-injuryillness - In Small Scratch to Right Workship say on the south and of Markeling Area, a plece of the steet blade's NL-injuryillness - In Shin the original state of the saybhatt striking the original strike or Contractor Injury says the saybhatt striking the original strike or the saybhatt strike or
(1) incident Humber 23413 Business Unit Cracking Location Aliay Facility Name Richmons Incident delle 8/23/2011 Type of Process: Sulfure Accidifydrocarbon Type of Equipment: Vesset Team Members: Laura Leeds Mard Leinke Praneil Present Ron Moore Eric Grani Incident Description: Operations received the low level starm for D-1482 Sulfuric acid sump (SAS) vessel; It was observed that the level went to zero. The operator field verified and found acid in the acid	(1) II was a bee							The second secon		Territoria de la constanta de	Annual control			(1) Employee was cutling asphalt with a walk behind, self moving saw when a piece of the steet blade distodged and struck the employees right shin	(1) Employee was cutting asphall with a walk behind, self moving saw when a piece of the steet blade dislodged and struck the employees right shin

	1				T		T		
	23461	23469	23465	23466	23 454	23456	23436	23420	23413
	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Rafinary	Richmond, CA - Refinery	Richmond, CA - Relinery	Richmond, CA - Refinery	Richmond, CA · Rafinary	Richmond, CA - Refinery	Richmond,
	107/2011 4:30:60 PM	10/7/2011 9:15:00 PM	107/2011 6:27:00 PM	10/7/2011 6:27:00 PM	107/2011 12:00 00	10/7/2011 12:00:00 AM	107/2011 12:00 00 AM	9/29/2011 4:00:00 PM	9/23/2011 17.20000
	Clased	Closed	Closed	Closed	Clused	Closed	Closed	Clased	Cicosed
	Loss	Loss	Loss	Near	Loss	Near	Loss Neer	Loss	C 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
***************************************	Motor Vehicle Collesion in	Operator tek discemtent in left knee while standing up	MVC at 91 Gale parking fot. Both EE leaving to go home when collision occured.	MVC at 91 Gate parking tot. Both EE leeving to go home when collision occured.	1	contractor sprayed	H2S moniter alarmed	Cut buried phone line on ridge road	D-1462 add vessel lask to
The Crude Pump Station (CPS) Operator was at #7 Pump station to turn on P- 6 for a displacement on the 16" crude after the Mississippi Yoyagar had	A approximately 4:30pm Richard Kingt a Mistras employee) was backing out of a panking spot in a company wan. He tried to look in all directions for cleatance. Vision can only be achieved through the mirros because of the van design. He proceeded to back up and came in contact with a Chevron touck. The Chevron touck had a small dent on the back side of the front pessenger wheel well. Richard a small dent on the back side of the front pessenger wheel well. Richard came in and told me about it immediately. We waited outside until we saw a Chevren employee and told him about what had happened. He said it was his truck and that we could wait until the next day 10-bit for procede and who to contact.	I	Certified Safety/Timec: As Contract EE moved forward across 1 parking stall, 1 Lane and scross 2 parking stalls collision occured with other Contract EE exiling parking lot in regular Lane flow of Traffic.	Certified Safely/ Timeo: As Contract EE moved forward across 1 parking stall, 1 Lane and across 2 parking stalls collision occured with other Contract EE oxiling parking lot in regular Lane flow of Traffic.	atmospheric PSV lifted to grade while reducing feed to TKN, E-732 Boiler feed water preheaser.	contractor sprayed with dissel @ E-410s (small amount)		Fenceing crew was digging hotes for fence post. They discovered a 25 pair cable was damage from their diging tool.	Operations recieved the low level alarm. The level whent to zero. The operator checked it out and found the acid tin the acid sump. The operator investigated and round that level was leaking links the containment sump. Operations covered the sump to keep water out of it. They system is now being controlled by vaccum husbs.
	Transportation	lnjury/ilness	NL-Transportation - Personal Usa	NL- Equipment/Property Demage - General Liability	NL-Operational ProcessProcedures - Sefety Systems	NL-Injury/linees - Confractor Injury	NL-Injury/Illness - Contractor injury	Equipment/Property Damage	. NL-Environmental -
	(1) Did not use a spotler white becking up and did not walk behind the vehicle to see if any obstructions existed, (2) Did not use a spotter white backing up and did not walk behind the vehicle to see if any obstructions existed, (3) Did not use a spotter white backing up and did not walk behind the vehicle to see if any obstructions existed.	(1) Why did operator fael pain behind his knee, No cause could be determined.			(1) Operator dd not work with south ISO to get the LPBFW pressure down enough to not PSV., (2) SOS. Warning Devices to E-722 (LPBFW) high pressure alarm in place, (3) SOS: Taking & Procedures: Pressure Bypass Weller Remained Closed, Oeleyed communication from NISO to SISO. NISO console operator fending to process changes due to reduced feed rates, 4) SOS. Training & Procedures: Pressure Bypass Valve Remained Closed, Delayed communication from NISO to SISO, NISO console operator fending to process changes due to reduced feed rates, 4) SOS: Siberber (saus: Design & Engineering / Miligation Devices: Danger to personnel from spraying pressurized hot BFW			(1) Underground phone line was not mark corect above ground.	sump outside of the vessel enclosure but in the sump itself. The operation investigated and found that the level was leaking into the conlathment sump. Operations covered the sump to keep water out of it and vacuum teacts were set up to remove the seld from the sump. Current operation with no SAS evaluable. This investigation covers why the vessel bad clied, FIVE WHY'S 1. Why did "above" happen? D.1482 failed, FIVE WHY'S 1. Why did "above" happen? D.1482 failed because the vessel is located in a below grade covered pitramp that does not allow for on stream monitoring and allows for other corrections to be present attacking the vessel sexternally. 2. Why did "1" happen? The vessel was originally paced in a covered bit in order to allow sample stations to crain to his EAS when in use from initial installation of the ASA when in use from initial installation of the ASA when in use from initial installation of the ASA when in use from initial installation of the ASA when in use of the initial plant causing an attempt compared to the sump and the sump is entering from the their piping where a kitemety compared to the initial piping where a failure had occurred on the initial piping where a failure had occurred on the initial piping where a failure had occurred on the initial piping where a failure had occurred on the initial piping where a failure had occurred on the initial piping where a failure had occurred on the initial piping in the leaking into the sump is entering from the their piping where a failure had cocurred on the initial piping in cover it in the piping in cover it in the causing the cover to reach the vessel below. 4. Why did "3" happen? The sufficial addition to sufficial addition and the sump in the sum in the su

	22	23	Na Na	N G	23	23	23	رم	23
	23497 F	23496	3488 F	20488	23487	23486	23486 F	BO B	7.0 H
Richmond. 10/9/2011	Richmond, CA - Refinery	Richmond, CA - Refinary	Richmond, CA - 23489 Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA- 23483 Refinery	Richmond, CA - 23483 Refinery
10/9/2011	10/9/2011 12:00:00 AM	10/9/2011 12:00:00 AM	10/8/2011 6:00:00 AM	10/8/2011 6:00:00 AM	10/8/2011 11:30:00 AM	10/8/2011 9:30:00 AM	9:36:00 AM	10/8/2011 10/45/201	10/8/2011 10/45:00 AM
	Clased	Clased	Closed	Closed	Closed	Closed	Closed	Closed	Closed
_	Near Loss	Loss	Loss	Loss	Near Loss	Loss	Loss	100	Loss
	Contract EE reported being Dizzy.	Contract EE reported arm pain.	Possible Bug Bite w/ S Swollen Hand	Possible Bug Bile w/	H2S Monitor Adivations (4)	Line of Fire/ Employee hit nimself in the with tool while pulling on insulation	Une of Fire/ Employee hit bimself in tip with tool white pulling on insulation	Hydrocarbon spil (App) 100 BBLS) te secondar Containment at #7 Pum Station	Hydrocarbon spill (Approx. 100 BBLS) to secondary containment et #7 Pump Station
	Contract EE reported being dizzy. Seen by Chevron Fire and transported to clinic for rollow up.	Biggs: Contract EE reported arm pain seen by Chevron File and trapported to Chevron Chilo (or follow up.EE had been working on moving crans mats.	EE reporte a possible fisact bit to his right hand may have occured approx 0500 - 0501 while he was desking out for the day. Noticed litching and a possible small while borrp, but no insert was seen. At approx 1000, englolyee noticed mild swelling of his right hand, although no obvious bile mark was present. Et was evaluated by Chevron Fire EMTs, Further evaluation at Chavon Maddeal Circh overseted a entell insect bile wound? point-of-entry. EE Chavon Maddeal Circh overseted a entell insect bile wound?	EE reported possible insect bits to his right hand may have occured approx ofoco-c350 while he was drestling out for the day. Noticed tiching and a possible small while borrp, but no irsect was seen. All approx 1500, employee noticed mild swelling of his right hand, although no obvious bits mark was possent. Et was evaluated by Cheyron Fire EMTs. Further evaluation at Cheyron Medical Chinc revealed a small insect bits wound? point-of-entry. EE received first either and was returned to work.	During the process of preparing K-1400 for removel, residual liquid in the pipe spools being removed dripped out and activated the workers H2S monitors	Employee was using a pair of piers to remove a screw from pipe insulation, located on the rolled dock for vessel 1410, at approx 6:30 am, his piers sipped from the read of the screw and struck him in the upper itp.	Employee was using a pair of pilers to remove a scrow from pipe insulation, located on the rolled dock for vessel 1410, at approx 9:30 am, his pilers sipped from the head of the screw and struck him in the upper Fp.	The Chude Pump Stallon (CPS) Objector was at at 7 Pump station to turn on P- tic a displacement on the 16" Could set the Mistassippi Vergage had finished dischaeging HYFCC to T-1838. The CPS Objector noticed that there was a 2-3 layer of hydrocambon throughout his native area of his secondary containment of the Pump Station. The CPS Objector laid related that during first founds this monthing at approximately 6800Hts he could small hydrocambon but could not locate where it was confort from and the secondary containment was empty. Both the Crude Head Operator and Shift Team Leader were notified and Chevron File acenducted area modeling from the Mississippi Voyager, Chevron File acenducted area modeling and there was no detaclable LEI. and Banzers readdous were at 10" (no PPE required). Notifications were made to the RRIL, BAS Section Head and ABU manager. We are ourrelyly pumping out the secondary containment to 1-1504 using the sump pumps and are also using how vacuum trucks to essist in draining the sump. When the secondary containment is drained was will be able to conduct a more thorough to check of the plaining his promp stallon for leaks. We have an Operator y the pump stallon monitoring he area. Wharf Safely Operators are proceeding inters on their side of the pump stallon. We estimate this spill to be approximately 100 barnels.	was a 2-3 layer of hydrocarnon throughout he entire area of the secondary was a 2-3 layer of hydrocarnon throughout he entire area of the secondary containment of the Fump Station. The CPS Operator late related that during first rounds this menting at appointmately 4800Hrs the could small hydrocarbon but could not locate where it was coming from and the secondary containment was empty. Both the Cruste Head Operator and Shift Team Leader were notified and Chowron Fire were colled ext. All licentifiers through the pump station were shutdown including a desaid discribing to T-2215 on the 2 DB and a diseat slope discribing on the St Ballast in 7-1504 from the Assassippit Usyager. Chevron Fire conducted area monitoring and there was no delectable LEL, and Benzene readings when at 1.0 for PBE required). Notifications were made to the RSt, B&S section Head and ABIU manager. We are currently pumping out the secondary containment to T-1504 using the sump Pumps and are also using who vacuum frucks to assist in draining the sump. When the secondary containment is drained the will be able to conduct a more through checking times on their side of the pump station or lasts. We have an Operator checking times on their side of the pump station. We are siden this spill to be approximately 100 between the pump station.
	NL-injuy/ilinasa - Contractor injury	Injury/IIness	NL-injury/liness · Coniracior injury	injury/linoss	NL-injurylliness - Contractor injury	NL-injury/liness - Contractor injury	injug/liness	Loss of Conlannien	Environmental
		(1) Altempting to lift load by hand	(1) Insect bitos	(1) insect bitos	1	(1) Use of proper tool. The worker should have used a rul driver and not a pair of pilers to loosen and remove the screw.	(1) Use of proper tool. The worker should have used a rut driver and not a pair of pilers to loosen and remove the screw.	(1) Work Psckage/ Permit NI , (2) Hazard Analysis NI , (3) Inspection not required, (4) Additional Consideration, (5) Work Psckage/ Permit NI , (6) Hazard Analysis NI , (7) Hazard Analysis NI , (7) Hazard Analysis NI , (8) inspection not required, (9) inspection not required	(1) Work Package/ Permit NI . (2) Hazard Analysis NI, (3) Inspection not required, (4) Additional Consideration, (5) Work Package/ Permit NI . (6) Hazard Analysis NI, (7) Hazard Analysis NI, (7) Hazard Analysis NI, (8) inspection not required, (9) inspection not required.

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	23572	23568	23659	23550	23526	23519	23518
	Richmond.	Richmone, CA - Relinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	23518 Refinery
	10J5/2011 9:C0.00	9/21/2011 12:00:00 AM	10/8/2011 3:00:00 PM	10/6/2011 3:30:00 PM	10/10/2011 12:00:00 AM	12:30:00 AM	AM 00.00
	Clossed	Closed	Cloued	Closed	Closed	Closed	Closed
	Ne ar	No ar	Near Loss	C .	Near	Near	Loss
	Cracking DMC Server multiple Collect files	Lab Blas for FGC Inferentials resel to zeso	Polential fre hazard associated with material loaded onto a vecusm truck	A steging contractor sustained a first aid right while disassembling steging at TKC off Gas Compressor K714A at North Isomax. The worker was till on the hard hat and grazed on the face by a valve handwhee/chain that unexpectedly disconnected from the valve atem.	Contract EE's H2S monitors Activated	Missing LOTO Box Key 222	Monitors Activated,
On 10/4/2011, a Cracking process control engineer was validating collect files on the DMC server for a future step lest on the AMy Deproparizar. During one of the validation attempts, the order that DMC server validation attempts, the order of the validation attempts, the order of the calculation attempts of the DMC server session to be terminated due to a lock up or the calced file. The DMC server session was re-storied and validations were completed. The DMC Server was logged out On 105/2011, DMC Server was observed to be a temporary condition with no concerns. At 900AM, a Cracking process control engineer or server was running to the end from the PCN administrator that the Cracking DMC server was running to the end of the Cracking process control engineer went into the rack room and physically observed the DMC Server for eight of very temporary to the process control engineer overheading control of the calculation.			Sponk caustic material was loaded onto a vectuum truck from V-1936. The material was desmed to be high in H2S and to not contain hydrocaron material. After the second load of this material was pressured off kito a poly lank for storage, the contractor was instructed to lead the vapor space for H2S level. When the vapor space was tested with the four gas mater, the LEL pagged out indicating there was hydrocarbon in the tank. The information given to the vacuum truck competity was not correct and could have resulted a firefergoistic given the material was pressured from the vacuum truck and should have instead been pumped off the furch.	TOP INVESTIGATION: Initial description: A staging contractor sustained a first lad injury white diseasembling straining at TRC Off Gas Compressor K-714A at 10drtl scoraw. The worker was this on the hard hat and grazed on the face by a valve hardwheel/chain that unexpectedy disconnected from the valve stem.	Mairk: Two Contract EE's personal H2S Mointer slarm was set off in the area of E-1258.	Missing LOTO Box Key 222. This is an old LOTO style box. CFD did not have the spare key	Rainx, I we contract EE's had their H2S Monitors activate while installing Boiler Makers on K-1100.
	NL-Quality - Product Quality (int)	NL-Business Process	NL-Fre/Explosion	เกรษาว/เมเกอรร	NL-injury/illness - Centractor injury	NL-Business Process - Business Interruption	NL-Injury/Illness - Contractor injury
	(1) PCE did not have Collect Procedure on hand to saview abnormal program termination handling. (2) PCE did not have Collect Procedure on hand to review abnormal program termination handling.	(1) (PC) - poor Itairing in online IO aplication system procedures (do not perform hits function very rollen) Action -	(1) The GRU Shuddown procedure (GRU-NP-3001) did not reference the V-1936 degassing procedure (GRU-XC-4310), (2) The V-1936 degassing procedure (GRU-XC-4310) does not include a step for persidents to check the LEL of the material in V-1936, (2) It has not been standard practice to obtain H2S and LEL readings for all vacuum ruck loads during shuddowns	(1) SOS: -Design & Engineering -Maintenance & inspection -Midgition Devices Vibration from valve operation and crutine compressor operation loosened the eat screws over time . (2) Stobber Issues. Design & Engineering:			

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	23658	23624	23624	23524	23586	23580	23572
	Richmond, CA - Refinary	Richmend, CA - Refinery	Richmond, Refinery	Richmond CA- Refinery	Refinery	Richmond, CA - Refinery	Richmond, CA - 23572 Reiney
	10/11/2011 2:45:00 PM	10/10/2011 3:00:00 PM	10/10/2011 3:00:00 PM	10/10/2011 3:00:00 PM	9/23/2010 12:00:00 AM	10/4/2011 1:00:00 PM	
	Closed	Closed	Closed	Closed	Closed	Closed	Closed
	Loss	LOSS	C 99	Loss	Loss Near	Loss	Loss .
The lube system that supplys the pressure packing and cylinder lube as damaged. The lack of oil to the pressure packing could cause a leak path	Chawan vehicle hit by contractor truck.	Natural gas routed to T-	Natural gaa routed to T.	Natural gas routed to T-	RE-102 WRONG DUE DATE SUBMITTED IN RECOMMENDATION		Cracking DMC Server r multiple Collect files running CPU load to 100%
	A Chevron cor was parked front end first in a parking space at the Swan Associates parking lot. A Swan pick-up fuck with a producing flow hitch was backing into the space right next to the driver's side of the Chevron vehicle. While backing in, the tow hitch caught the left comer of the rear humper on the car, and lore a 10 inch long gash in the bumper.	INITIAL DESCRIPTION: At 3:00 PM the coeration was making counted when his spoiled this pressure valves on 7% stark crof by purples liquid on the root. TAPROOT DESCRIPTION: Natural gas was tradheristilly routed to 1:397 on October 8, 2011 at 16h37 when flow reversed from the headspace of V-153AP at the SDA. This resulted in a hazardous condition as natural gas wanted via the two for the stark of the reverse of the natural gas was the stark and introducing a nillingen to mitigate the first included corrowing off the tank and introducing a nillingen gurge to the head space. Efforts to locate the source of the natural gas was found the SDA. The source of the natural gas was identified and itsolated on October 13, 06ft04. The consequence of this fixed entire and stolated on October of Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx		WITLAL DESCRIPTION. At 300 PM the operator was making rounds when he spotted the preserve valves on the tank reof burping liquid on the root. APROOT DESCRIPTION: Natural gas was inadvented by routed to 1-397 on October 8, 2011 of 16473 when flow neversed from the headspees of V-165AP at the SDA. This resulted in a hazardous concliden as natural gas vented via the Nor breaker valves and pressure relief door on the roof of 1-297. Altempts to mitigate the first inclused conducing a full controlled as the source of the natural gas vented to have been sufficient to the head speece, afforts to locate the source of the natural gas vess included on October 13, 68hOd. The consequence of the natural gas vess identified and solded on October 13, 68hOd. The consequence of this incident was a fittle V deviation for exceeding the vego pressure instit of 0.5, 518 for a tank in unequisated services and the SDA. Other Reg 6-5-117 and Permit Condition 20784. The refinery also received two oder complicated from the community, it was determined that the event met the requirements of a Ter I Loss of Containment (LOC) Incident.	E-10ZE was reported to the ABU to be due for a permit inspection 11/1/11. The ectual due date 5/12/11	After tuning 2" purge velve on terth #4 vepor recovery operator turned away and struck elibra on nearby steging	incliced. Next the engineer lagged on the DMC Server from the workstation to view the CPU load and identify any issues. Upon inspection of the DMC Server, It was found that four unknown colled flee were numbing. The collect files were immediately terminated because on the previous day no collect files were intentionally started. The DMC Server EPU load dropped to 17% and the Webviewer speed refurned to normal. Investigating the unknown collect files were that the keyboard sticking during collect file validation had uniteralismally cused four collect files to be started at the serve four collect files to be started at the serve four collect files to be started at the serve four collect files to be started at the serve four collect files to be started at the serve four collect files to be started at the serve four collect files to be started at the serve four collect files to be started at the serve four collect files to be started at the serve four collect files to be started at the serve for the files files for the files for the files files files for the files f
	Transportation	Environmental	Ragidatoy Compliance	Loss of Containment	NL-Business Process - Business Process	(ស្វ័យអូ/ilinass	NL-Business Process
	(t) other driver	(1) Practics / repetition Nt. (2) No procedure, (3) Practics / repetition Nt. (4) Equipment Environment not considered, (5) Additional consideration, (6) Additional consideration, (7) Additional consideration, (8) Throwadge Nt.	(1) Practice / repetition Nt. (2) No procedure, (3) Practice / repetition Nt. (4) Equipment Environment rot considerate, (5) Additional consideration, (6) Additional consideration, (7) Additional consideration, (7)	(1) Practico / repolition NI, (2) No procedure, (3) Practics / repolition NI, (4) Equipment Environment not consideration, (5) Additional consideration, (6) Additional consideration, (7) Additional consideration, (7)	(1) - Inspector did not use lest inspection date when updating inspection Manager.(Actual Inspector not available for intervew).	(1) Operator did not take time to lock around for oporational clearence	(1) PCE d.d no) have Collect Procedure on hand to roview abnormal program termination handling. (2) PCE did not have Collect Procedure on hand to review abnormal program termination handling.

https://impacterm.chevron.com/IMPACT/ANYWHERE/Reports/exports/scenario_159134_f8a5390b-1e90-4874-b012-4d17412a3a40.htm 8/9/2012

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	23811	23765	23764	23759	23709	23706	23696	23670	23660
	Richmond, CA - 23811 Refinery	Richmond, CA - Refinery	Richmond, CA Refinery	Richmond, CA - Refinery	Richmond CA Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA Reffinery	Richmond, CA Refinery
,	10/13/2011 5:00:00 AM	10/12/2011 8:01:00 PM	10/13/2011 12:00:00 AM	10/12/2011 10:37:00 PM	9/15/2011 12:00:00 AM	9/21/2011 12:00:00 AM	10/12/2011 5:30:00 AM	7:15:00 PM	10/10/2011 8:00:00 AM
	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
<u> </u>	Loss	Near	Near Loss	Loss	Loss	Near Near	Loss	Loss	Loss Vegr
	Fool Sprain, Too Conlusion	4 Rhen recycle compressor K-3550 ⊭ipped	H2S moritor elerm	Oil on the roof of T-3127	GHT Shuldown for repair of 2 steam PRDs	D&R DMC applications tost contraction to DMC license server located at Cracking	Gasoline over flow in compainter building due to ESO plained shuldown	Mosquitoe bites to neck and face	down the piston rod into the crank case which is vonted to atmosphere.
The vant controller on V-1020 (C-1020 OH) went open anading an instent flow of IK-d's and IC-d's to the relief system, this resulted in a tripping of the toldizer and short visible share. 'S Why: "Why was the loadizer tripped and flow to the flater? V-1020 vent do the flater? V-1020 vent vent do the vent vent do the flater? V-1020 vent vent do the flater? V-1020 vent vent do the vent vent vent do the vent vent do the vent vent vent vent vent vent vent ven	(Noch: Fook Sprain, Toe Contusion, EE; was decending a ladder on C 121UHZ20 at shift change when his loos elipped or in the adder rung and he landed on the ground in an uncontrolled manner (Fea) landing on his feet from a height of about 4 of. The dock above that he had to walk across to get to the ladder was very only.	The 4 Rhen recycle compressor K-2560 intoped Ulbrahoch Increased Aner Feel Pulled on 10/12 Capts After freed was pulled aduller on 10/12 Tay 11 12 PM, He compressor speed decreased. Shortly after, when K-3550 speed dropped below 5550 RPM, there was a step change increase in whealtone as measured by the wireless whether monitor. When responding to the K-3550 tip, the board operation saw that one of the vitration readings (35/A5002) was in alert. Usually at least low need to be in afent to take action per operations. Once K-3550 came brack ordine at 0.00 PM, the speed was 4500 RPM and the wheelss vibration monitor was readroj bow again as it was before head was pulled. Note 0ps was increasing the system pressure (35/PC69) with nitiogen from 6:24 PM, and again from 7.37 PM to the trip. Ops later Increased pressure with N 2 again from 12:10 AM until 12:21 AM with no issues.	Contract EE working on C-1220 Had H2S alarm.	In the first stages of of a 2 day claim clean to V-1102 Desabler, Nitrogen was used to pressure out the level in V-1102 to T-3127. This was a confinuation from day shit. The previous day operations had been using a sum just or emove the liquid swell-Money N-1102 was empty. X2 bleve through the T-3127. Oil blew through the T-3127 to the property of the Company of the Company of the Company of the Company of the Good Service of the Company of the Company of the Good Service of the Company of the Company of the Good Service of the Company of t	GHT tack an unplanned shutdown to repair 2 steam safely rolled valves that would not fully respectate a steam system upset The Cogen Upset can be referenced at LL#15909	D&R DMC applications to a connection to the Cracking DMC license server to be to a hardware upgrated on Creating APP node designated as the backup DMC Idente server D&R DMC applications generated error messages and initiated 10 day time-out count down timer. Some DMC controllers unceptackly turned off.	The size syes were being replaced in the comparator building which tripped power to the samps and their alarms relays in the control room. Through out the right about 2 pallons backed up inrough the floor (raps into me building	multiple mosquitoe bite to face and neck causing wells	It was an environmental release of HZs about 7ppm at he time of repair (per operation) This will need to be repaired to make the compressor reliable during INL-Environmental the S/D. Release
	injury/litness	NL- Equipment/Property Demays - General	NL-injury/filmess - Contractor Injury	Environmental	Equipment/Property Damage	NL-Business Process - Business Process	Environmental	injury/timess	NL-Environmental - Rolasso
	(1) Slippery surface			(1) Operator not having knowledge of polenitial impact to downstream equipment, no information documented in ipposedure to warm of risk to floating proof task	(1) internal damage can occur upon popping of the safeties to this model of relief valve. , (2) The Pilot Operated PRO's are a relatively new type of Safety device in U&E.	(1) Stopping and starting online controllers to not part of any of our sxisting procedures. (2) Stopping and starting online controllers is not part of any of our existing procedures or training.	(1) were unaware power to sump pumps were on the same as the emergency shuldown system so when power was tripped by work on the fire eyes.	(1) large bodies of still water natural mosqiloes erea	

	NL-Environmental - Retease	Contract EE H2S Bedge elermed at 7ppm while doing SCBA Bottle Watch ettendent duty at the 4 Crude boundary deck.	Coniract EE H2S Badge plarmed at 7ppm while doing SCBA Bottle Watch duty	Near Closed Loss	10/15/2011 5:14:00 AM	Richmond, CA - Refinery	23904
(1) Work request to remove insulation and replace with personnel profaccion acroen was not associate according to the scope of the work request (Not able to determine who the person was or why they did not complete the Work Request as written). (2) Teichnical sent in the work order process as written), (2) Teichnical sent in the work order process that not point whenever an IREC is completed to allow inspections to verify that it has been carried out according to their specification. (3) Additional Consideration (not a root cause). The MOC Process was not inclined for report of their specification, with personnel protection acreens. (4) Process for submitting an IREC for Routine Maintenance was not inclined to the content of the co	Equipmen(Property Demaga	Shultdown of H2A Train hulce due to a teak on H2A Train forced circulation BFW line during 16/14 startup and on 10/22 due to additional CUI found on intermittent blowdown and forced BFW circulation lines after sterlup. During start up of H2A Train after an electrical trip (see u. 12.3898), the 46/98 BFW forced circulation fires leaked on a section of 1.5" hotizonial piping. Plant was shall down to respective peak teatrup proceeded, and production resumed. During this time, the CUI group was also beginning inspection; the properts of the H2A Train startup proceeded, and production resumed. During this time, the CUI group was also beginning inspection; the CUI group discovered thin piping that was below calculated innipeding, the CUI group discovered thin piping that was below calculated innip and the 3-30.4 N/HB intermittent blowdown line and E-305C forced circ. BFW kine, as well as additional spots on both fines below flag thickness due to CUI. After thin piping was elscovered, the decision was made to shut down H2A Train on 16/21 to make piping repairs. At this point, the 402011 unphanned pilstoy workscope was executed including varuming of the SCR, replacement of a 24" COZ frange, and the piping was surround H2 production on 10/31.	H2A S/D due (c a leak on the startup 450# BFW force circulation line	Closed	10/14/2011 5:15:00 CH	Richmond, CA -	23903
	NL-Environmental - Refease	2 contract EE's and 1 CVX EE H23 badge starmed when going about work duties. 2 concract EE's were taking Temp, dean-up hose out of unit and CVX duties along to make the taking to make the take the taken to the equipment, Reading on contract EE's badge's were 16ppm and 6ppm. CVX EE badge reading was 16ppm. Suspect is Grub Line.	2 contract EE's and 1 CVX EE H2S Badge starmed	Closed Loss	10/15/2011 1:25:00 AM CI	Richmond, CA - Refinery	23902
	NL-Environmental - Release	Contract EE H2S Badge elemed at 42 5ppm when working 4 Coude boundary dock turning 1 in steam hammer blind lhat connected to Napitra Line.	Contract EE H2S Badge elarmed white working 4 Crude Boundary deck.	Closed Loss	10/15/2011 12:50:00 AM CI	Richmond, CA - Refinery	23901
(1) Dust on hardhel landed in EE eye	Injury/liness	Operator was heighing with A train startup. Operator was taking a breek and was taking off his hardhat when he felt something go in his siye. Operator reported this to his HO and HO called PP se Taken to clinic and Eye flushed. Returned to work.	Emplyee recieved a particle in the eye	Closed Loss		Richmond, CA - Refinary	23899
(1) OPeralips too quickly switched feed from 20 plant to 10 plant	Operational Process/Procedures	After Loss of A train , with NISO plants culting feed, 4H2S began to lose feed and became instable. Ops decideed to Transfer feed from 20 plant to 4H2S in order to stabilize the plant. The transfer was done foo quickly and caused a feed exike in 4H2S which in turn ceused a spike in Sweet gas to V-475 ny fuelgas drum and overpressured it to relief.	V-475 PSV lifed to relief	Closed Loss	10/14/2011 10:20:00 AM	Richmond, CA - Refinery	23897
	NL-injury/liness - Employee frjury	Riggers rigging out E-410F. Flenge wedge fell from unknown location. [Upper decks] sitting top of exchanger. No injurys.	Fisnge wedge fell to ground	Closed Loss	10/14/2011 12:00:00 AM CI	Richmond, CA - Refinery	23895
(1) No gloves	înjury/ilineas	Bigge: While getling geer at the Ranch contract EE recived minor cut to thumb.	Contract EE cut finger.	Closed Loss	10/13/2011 9:00:00 AM CI	Richmond, CA - Refinery	23853
	NL- Equipment/Property Damage - Equipment Damage	Matrix: Tube baffle contacted the ground.	Bundle contacted the ground at the wash pad.	Near Closed Loss	10/12/2011 12:00:00 AM CI	Richmond, CA - Refinery	23852
	NL-Environmental - Retease	While fresh at job at 4Couse boundary deck is in progress. The JHT plant H2S evacuation alarm sounded off. Also contract EE personal H2S sounded off and reads at 1 1ppm.	Contract EE H2S monitor alarm went off	Closed Loss	10/14/2011 2:00:00 AM CI	Richmond, CA - Refinery	23850
	NL-Environmental - Release	2 Contract EE H2S Badge alarms sounded when Shuldown-Turnaround E- 1185B clean-up plong low point blow down was opened.	2 contract EE H2S Badge alarmed, 1@12ppm and 1@15ppm.	Ctossd Loss	10/13/2011 9:50:00 PM CI	Richmend, CA Refinery	23846
	NL-Injury/illnoss - Contractor Injury	2 Contract EE H2S Badgo slams soundod when Shuldown-Turnaround E- 1186B claan-up piong low point blow down was opened.	2 contract EE H2S Badge stermed, 1@12ppm and 1@15ppm.	Near Closed Loss	10/13/2011 9:60:00 PM CI	Richmond, CA - Refinery	23846
	NL-injury/iliness - Employee injury	While opening bleeder for E-1185B to check for cleanliness employee H2S monitor went of, Emloyee ewere of potential H2S.	Employee H2S monitor went off white apening bleed to check for deanliness	Closed Loss	10/13/2011 10:00:00 PM CI	Richmond, CA - Refinery	23837
(1) Operator error. Operator entered the wrong setpoint into the bias controller which resulted in vent valve opening to flare.	NL-Environmental - Release	careful consideration would need to be given as to what appropriate bias set point should be entired. When the control loop was placed in auto (cascade) the appropriate set point for the existing conditions was not input into the bias controller which resulted in the vent velve opening to the flare.	V-1020 vent to relief system causing trip of totalizer and short visable flare	Closed Loss	10/13/2011 5:15:00 AM CI	Richmond, CA - Refinery	23813

	23929	23928	23925	23925	23923	239	23921	23921	238	23915	239	23912	239
	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Passary	Richmond CA - 23922 Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - 23919 Refinery	Richmond CA - 715 Refinery	Richmond CA - 23913 Refinery	Richmond CA - 312 Refinery	CA - 23912 Refinery
	1, 10/16/2011 5:00:00 AM	1, 10/16/2011 6:00:00 AM	d, 10/16/2011 2:00:00 AM	d, 10/16/2011 2:00:00 AM	d, 10/15/2011 11:45:00 PM	d, 10/16/2011 12:18:00 AM	d. 10/15/2011 9:30:00 AM	d, 10/15/2011 9:30:00 AM	d, 10/15/2011 10:05:00 PM	d, 10/15/201 10:19:00 AM	d, 10/15/2011 3:00:00 PM	1, 10/15/2011 12:30:00 PM	12:30:00 PM
	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Clased	Closed	Chosed	Closed
	Ne pr	Loss	Loss	Loss	Less	L Nos	Loss	Logs	Logs	C Nega	Loss	Loss	Loss
	Violation of RI-341 Appendix VIII. Cut Line Tepo procedure	T-3104 Odor Complaint (confirmed)	Operator hunt foot while dosinding down from a ladder.	Operator burt foot while destroling down from a ladder.	TOP INVESTIGATION :Contract EE struck on fool by Shackel	Mnor MYC; Ford F-450 Fished Truck vs. 10 Passenger Van	Worker received a foreign body in left eye while grinding on a steel column. The worker was wearing PPE.	varker received a foreign body in left eye white grinding on a steel column. The worker was wearing PPE.	EE contractor scraped left knuckle with minor abresion.	Potential violation Reg 65- 111.3, Start/stop filling of T-3104 before the roof floated	Leceration to Palm of Hend	insect blie	Insect bile
The incident this marning involved a Chevron Fuel truck running over a adiographer's crank. The Crank is a mechanical device that sliews the indum Source to be sent down a guide tube to a component that requires an x-ray (i.e. pipe weld, corresion on a pipe etc). The mechanism was damaged as a casult of the vehicla driving over it, follunately the fast thinking radiographer was able to retract the secret with the demanded crank. This provertied is	Out Line Topic Procedure was not collowed resulting in cold culting the wrong 2" Sour Walter line at the boundary of 1114A bil. 11 pit and 14 pit each have a Sour Walter line at the logisther at the boundary. Both Sour Water Lines were bearined to be replaced during the 4Q11 RLOP TX and were sinestly obsered and binded. The 14 pit Sour Water line was cut instead of the 11 pit Sourd Water Line. Upon realizing this issue, Contract Company Immediately supped work and neitled Operations. Field Investigation reweighted that the 14 pit Sour Water Line.		Operator was working on the E-102's. After completing the work the operator was desending down from the incider and felt a pain in thane foot. The operator felt they must have hunt it on the last rung of the ledder. The operators book searmed to be very weak in the middle of the boot. They worked with the pain until stell the last. Then they thromed the STL of the pentilation that later that shift. Then they thromed the STL of the pentilation.	Operator was working on the E-102's. After completing the work the operator was desending down from the lacker and felt a pain in there food. The operator sell they must have but it on the last rung of the lacker. The operators book seemed to be very weak in the middle of the book. They worked with the pain until later that shift. Then they thereformed the STL of the spenial injury immediately plant prolection was called for a medical eveluation.		Contract EE backed Ford F-450 Flatbed Truck into parked unoccupied 10 passenger van near the DAR SVD Turneround Lunch Tent after gelting and parking Lunch proteinsead from Lunch Truck. Minor damage: Left side parking sight broken and front fender barely bent.	Foreign body in workers left eye. The object was easily removed with a flush, no embedrant occurred.	Foreign body in workers left eye. The object was easily removed with a flush, no embeddrent occurred.	While contrador EE was effecting to lines to copus blower at the bass of C- 240, EE scraped left hand knuckle. EE stated that injury scraped through gloves.	Holes where noted in the fre foam system while T-3104 was being 1st filled after the major turnaround.	Allstas: EE was exiting a manyey on C-1600, which is a tight fit and was naving difficulty exiting due to a box section of the tray builted up to the manway. He reached back to push himself indusin the manway platting his hand on the box section of the tray. The box had a sharp edge causing a learnetion to the pair of his hand. EE steed that he was wearing gloves but the edge cat hough the glove.	EE was working on a pipe and fell a bile on the back of his neck.	EE was working on a pipe and felt a bite on the back of his neck.
:	NL-iกjury/linesa - Contractor injury	Regulatory Compliance	NL-injury/กักess - Employee injury	injury/lliness	lnjury/linese	NL-Transportation - Contractor	înjury/liness	NL-injury/illness - Contractor injury	injury/linese	NL-Environmental - Release	injury/iliness	NL-injury/iliness - Centractor injury	tojugiliness
	(1) Cut Line Tape Procedures were not followed	(1) Cannot be ascardan it the odor originated in T304. All staps as southered in the first in procedure were all followed. Verification conducted by Operation around T3104 wind glinder door not indicate any coor that can be shirbured to the odor complaint in Doean Avenue.		,	(1) SOS: Training & Procedures: Lessons Learned Bruised Foot, 35bs. "Beji" Shackie Rolled (fell) Cnto Rigger's Foot, Shackie stipped from rigger's hand.		The worker should have trained the sparks away from himself, (2) Their was no training beyond skilled craft training for hits specific task.	(1) The worker should have trained the sparks away from himself. (2) Their was no training beyond skilled craft training for this specific task.	(1) blower had some sharp edges. LPSA would've showed that, (2) Not ewere of hand placement	(1) No communication was done to the Shift Team Leader with regards to Air District recuirement to continuously fit the teach until the roof as floated	(1) Body position	(1) gud bile	(1) bug bite

22	ž	24	23	N.	23	23	23	23	23	23	23	23
E 202	24007 R	24007 R	23999 R.C.	23997 R	23995 7.O.R.	23971 R	23951 7.0 R	23951 R	23944 R.C.R	23934 R	23932 R	Richmon CA - 23932 Refinery
Richmond, CA - 24015 Refinary	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	יי. ו	Richmond, CA - Refinery	Richmend, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA -	ق.
10/17/2011 8:00:00 Ри	10/17/2011 2:45:00 PM	10/17/2011 2:45:00 PM	10/17/2011 2:15:00 PM	10/17/2011 2:30:00 PM	10/15/2011 11:00:00 AM	10/13/2011 7:00:00 PM	10/17/2011 2:00:00 AM	10/17/2011 2:00:00 AM	10/16/2011 10:30:00 AM	10/16/2011 1:00:00 PM	10/16/2011 6:00:00 AM	10/16/2011 6:00:00 AM
Closed	Closed	Closed	Closed	Closed	Closed	Clased	Closed	Closed	Closed	Closed	Closed	Closed
Loss	Loss	[058	Loss	Loss	L Near	Near Loss	[038	Loss	Loss	Loss	Cose	Loss
Contract EE Particle in Eye.	1/2" diameter size steam burn betow right wrist on operator.	1/2" diameter size steam burn below right wrist on operator.	Jet Spit to Contaiment	Smail Range leak at MOV 888 (21 charge to T-3100)	Green Card, Tank vapor caused an odor, Location; PL Richmond	Console operator unclear of the meaning of an Honeywell alarm	Strains from slip, trip and fall.	Sirains from slip, trip and fall.	Worker stung by bee	Damaged bundles	Fuel truck ran over contractor's guide tube crank, Fuel Inck appears to have been moving forward and ran over crank that was just outside brankfary appearion, he	rule l'utox ran over confractor's guide fube crank. Fuel truck appears to have been moving forward and ran over crank that was just outside boundary tape for pipe weld x-ray inspection.
Contract EE in 4 Crude gravel fot doing JHA felt something in eye. EE walked across Plant to eye wash slation. Eye wash alarmed to OPS, Control House. OPS, found EE flustring eye at eye wash. Chevron Fire Dept. called to administer aid. EE taken to Refinery Clinic by Chevron Fire Dept. for further evaluation.		Operator was using the wash down hose with steem injection to move oil at 1A Separator near P-104. While moving the wash down hose in a side to side motion, the metal fitting on the nozzide came into contact with his right wrist, causting a small burn less than 1/2" inch in diameter. Operator was wearing leather gloves and his selves were in the full extended position.	Jet spill from missing bleeder valve located on the twin seel valve on the 51 Lina		Creen Card. While filing T3104, vapor from the tank caused an odor in the PL Richmond community that impacted several of the residents and caused many complaints. The wind direction in the two-day period was from the refinery directly into PL Richmond. This will likely result in a BAAQMD violation and will be a scorecard event. Most important it was a negative impact to our neighboring community and did not help the Chavnon impage.	UPS alarm (91XA800G) came on in the DCS. Operations unclear as to what the atarm ment. Hoad Operator notified the STL on crow and gave lumover to the following Head Operator.	Worker strained right enkle and left wrist when she slipped on a step coming dawn from a two step equipment platform. The worker miled has ankle on a fitte hase and fell backward straining her wrist while trying to brash her fall. Plan! protection was notified, responded and referred worker to the Cherron Medical facility where the worker was examined and released back to full duly.	Worker strained right enkle and telt wrist when she slipped on a step coming down from a live step equipment platform. The worker troited had enkle on a fire nose and fell backward straining her wrist while trying to break her fall. Plant protection was notified, responded and referred worker to the Chevron Medical facility where the worker was examined and released back to full duty.	Bee sing causing swelling	Damage to luties on two seperate bundles(E-212A / E-213C) at washpad caused by improper placement of bundles on rollers. Also rolling of bundles while tubes are resting on rollers inciseed of resting on baffles.	The incident this morning involved a Chevron Fuel truck running over a radiographer's creak. The Crack is a microenized device that allows the influent (i.e. pips wish, concession on a pips etc). The mechanism was demaged as a result of the white driving over it, fortunately the fast thinking radiographor was able to rained the source with the damaged crank. This prevented a source ratioval and any disruption to work in that erac. The following items were observations made by contractor who owned guide tube crank: 1. The fuel truck were observations made by contractor who owned guide tube crank: 1. The fuel truck was not backing up, it was driving forward. 2 The cranks were 6 to 8 inches outside the barrier tape, 3. The fuel truck was not backing up, it was driving forward. 2 The cranks were 6 to 8 inches outside the barrier tape, 3. The fuel truck was not backing up, it was driving forward. 2 The paties tube assembly was not backing up, it was driving forward. 2 The guide tube assembly was not backing to wind in the source by normal operation without the lander, not by use of a plant. 6. Location bottom of C-1510, plant it 4'5.	source lettlevel and any disruption to work in that area. The following litems were observations made by contractor who owned guide tube crain: 1 The fuel funck was not hadding up, it was diving torward. 2 The cranks were 6 to 8 inches outside the barrier tape. 3. The fuel funck was brushing alongside the boundary taps frying to get for its destination (Crarle) 4. The gickel tube assembly was not broken open. Just the whoring handle was broken off. 5 The technical was still abbe to whorling the source by normal operation without the handle, not by use of a priers. 6.Location bottom of C-1510, plant # 15
NL-injury/iliness - Contractor injury	NL-injury/likass - Employee injury	โกรู้บาร/มีเกอรร	Environmental	NL-Environmental - Operational Leak	Nt-Lessons Learned	NL-Business Process - Business Interruption	NL-injury/liiness - Contractor injury	lrýury/iliness	irjury/iiiness	Equipment/Property Damage	Transportation	Equipment/Property Demage
(1) dusty area due to wind	(1) Not awars of the consequences of their actions.	(1) Not aware of the consequences of their actions.	(1)	(1) Operators did not know that the 21 Charge line should always be vented to a tank.			(1) Work environment presented hazards i.e. dark, slippery surfaces, no hand reits on steps.	(1) Work environment presented hazards i.e. dark, slippery surfaces, no hand relis on steps.	(1) Lack of training or procedure for working in environment where workers can be exposed to bee stings.	(1) Missed placement of bundle on to rollers. Due to the way the battles are shaped.	(1) DWNER OF THE MECHANICAL DEVICE LAID IT OUTSIDE OF THE RADAITON BARRIER TAPE ON THE ROADWAY UNATTENDED IN LOW LIGHT CONDITIONS NOT ALLOWING THE TRUCK OPERATOR NOR HIS ASSISTANT TO SEE IT.	(1) OWNER OF THE MECHANICAL DEVICE LAID IT OUTSIDE OF THE RADAITON BARRIER TAPE ON THE ROADWAY UNATTENDED IN LOW LIGHT CONDITIONS NOT ALLOWING THE TRUCK OPERATOR NOR HIS ASSISTANT TO SEE IT.

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	24099	24007	24082	24081	24079	24078	24077	24071	24070	24056	24054	24023	24015
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	10/18/2011 6:20:00 PM	10/18/2011 10:30:00 AM	9/30/2011 11:00:00 AM	9/28/2911 10:00:00 AM	9/28/2011 11:00:00 AM	9/27/2011 9/45:00 AM	9/27/2011 11:00:00 AM	9/20/2011 7:00:00 AM	8/26/2011 1:30:00 PM	10/17/2011 10:00:00 AM	10/15/2011 9:29:00 PM	10/57/2011 7:00:00 PM	10/17/2011 8:00:00 PM
	Clased	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
	L098	Loss	Loss Near	Negr Loss	Nepr	Near	Near	Near	Near Loss	Loss	Near Loss	Loss	Loss
	Maint, electricien injured left middle finger	Contract EE received a minor wrist scrape, First Aid.	Green Card. Centractor working without a harress. Location: 4 Crude	Green Card. Forklift driver had no escort or Regman. Location: 4 Crude Parking Lot	Green Card, Centractor welding with no weld screen, Location; D&R 4 Crude	Green Card. Steem tracing line leaking. Location: S.Isomex compressor deck above E-903A	Green Card. Large crane travelling without escort. Location; 4 crude - Channel St	Green Card, Bridge #145 sideguard traffic rall still missing, Lecation: Gate 31 Scalehouse	Green Card. Too many hoses on ground, Location: 5 NHT	NH3 contaminated with H20, causing NOX wolstion.	USB Keypad failed on FCC GUS12	NOx exceedence on T.	Contract EE Particle in
A new source of LSSR from Nigeria was discherged to T3103 on 10/12/11. The chindre results prior to discharge were as high as 75 ppm based on samples vision in forestil at the Pannana Cenal. At this point wa made a decident to treat with damulatifier upon discharge. When it was discharged, there were some issues with the sityaction pump for 12 house but the romaining 30 hours of discharge were well mixed and treated. The first 500 BBLS of all 12 argo hotds wort to recovered oil in case there was some settlement of varier in taneit, upon discharge was lank was 25 ppm. It was allowed to settle of 3 days and releasted all whath lines it was observed that the chooled level was unchanged. The tank was then heated from 107 up to 135 F and allowed was unchanged. The tank was then heated from 107 up to 135 F and allowed	CVX electridan pilpred leit middle finger while deing PNA on a 4800 breaker Electridean pilled down on handle to change springs for cotang the breaker when handle auddenly sprang beck causing electrician's hand to hit against front cover. Bruise arros swelling on leit middle finger. Was seen at clinic and eleased beck fovork.	Bigge: Last shifted white transforing Imbers from a forbilit to trailer Contract EE recived a scratch to the wrist. Seen by Chevron Fire and released back to work.	Green Card. Contractor working on too a C-lander without a harness. Performing work at the edge with no be off point.	Green Card. Forklift driver traveling with large pipe with no excert or flag man.	Oreen Card. Driving loward nothyard contractor welding Inside weldbey with no weld screen; ark flashed into my eyes twice.	Green Card, AI S. Isomax compressor deck above E-903A, there is a steam trading line leaking at union connection and valves are teaking steam too at tace level.	Green Card Driving on Chennel St., a large crane travelling without escont. Crane vested into oncoming lanes.	Green Card. Bridge #1.45 across from scalehouse et Gote 31 stil not getting repaired. The sideguard traffic rail still missing.	Green Card. Too many hoses on ground in the middle of our Fresh Air job.	Check valves hung open on the NH3 system going into V-994, causing the old pump condensate to leak into the NH3 system, ending up in the NH3 builts. This caused the NOX is expixel houth, A train and the Co-gen plants. This caused a Title V violation at the Co-gen trains.	Operations were unable to change setipoints due to a failure of a LISB keypad on one of the GUSs alation at the FCC GIS console. This fekure did Impact unit operation because only one GUS stain was impacted:	At 03-40 Prs. on the moning of 10/17, nighthefit noticed an increase in T-2000 vaporizor (tenp indecising M25) in the NH3. Moves were made on the NH3 system to deal with the wes HH3. Moves conflicted on depath with the NOx still within range, At 17:00 ins it, the storp in the vaporizor cimbed dramatically. The amount of H20 in the NH3 significantly increased and was so high that it couldn't be handled and was carried over through the yaporizor and frio the ummer system. T-2009 want into violation at 21:00 friest—1000 strated reading the same way approx. 2 hours later, The lime lapper is due to it being downstream at bit. 1-2000 readed in the same manner due to the was HH3 and went line violation at 2000 has incident #2-4056, We (UAE) will do our investigation and create corrective actions upon completion of their findings.	Contract EE in 4 Crude gravel tot doing JHA felt something in eye. EE walked across Plant to eye wash station. Eye wash elarmed to OPS, Control House, OPS, fourd EE fushing eye all eye wash, Chevron Fire Dept. called to administer and EE teken to Refinery Clinic by Chevron. Fixe Dept, for further evaluation.
	Injury/Itness	injuryilliness	NL-Mjury/illness • Contractor Injury	NL-Injury/illness - Contractor Injury	NL-Injury/illness • Contractor Injury	NL-injury/iliness - Employoe injury	NL-รักรู่สรู/เปกอรร - Contractor Injury	NL-Lessons Leamed	Ntinjury/illness • Employee trjury	Regulatory Compliance	NL-Business Process - Business Interruption	NL-Environmentel - Release	ากุมรูปหายรร
	(1) amployes failed to maintain control of the stored energy of the breaker and allow her hand to be in the line of fine of the handles	(1) Improper PPE								(1) Double check valve sluck open on NH3 to V-884, allowing CPC to beckflow with both 8 a.rd 18 Plants shut down		(1) Double check valve stuck open on NH3 to V-894, allowing CPC to backflow with both 8 and 18 Plants shut down. (2) Double check valve stuck open on NH3 to V-894, allowing CPC to backflow with both 8 and 18 Plants shut down. (3) Managament dd not recognize that ownst ammonta quality in the refinery was an issue. There was no adequate oversite to address recoming issues.	(1) dusty area due to wind

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	24191	24190	24163	24162	24169	24158	24157	24156	24155	24154	24148	24141	24137
	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinary	Richmond, CA - Rofinery	Richmond, CA - Refinery	Richmond CA - Reinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA Refinery	Richmond, CA - Refinery	Richmond CA - Refinery	Richmond, CA - Refinery
	10/19/2011 11:00:00 PM	10/19/2011 10:40:00 PM	10,6/2011 10:45:00 AM	10/19/2011 4:03:00 AM	10/6/2011 7:15:00 AM	10/5/2011 8:00:00 AM	10/4/2011 2:00:00 PM	10/4/2011 12:55:00 PM	10/4/2011 6:45:00 AM	10/4/2011 3:00:00 PM	10/3/2011 5:30:00 AM	10/19/2011 11:00:00 AM	10/12/2011 12:00:00 AM
	Cipsed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Clased	Chased	Closed	Closed
	CN	L DES	Loss Neer	Near	Loss Nost	Near	Near	Loss Nesr	Near	Near	Near	Cogs	Loss
	JHT H2S slam white	EE reported having stomach pain after lunch	Green Cerd, Moving scissor lit before inspection, Location; RLP	The sir supply tubing to P- 22 disconnected causing PCV03d to fall closed, P- 22, which was booking a JPB dischange off of the Oregon Voyager was dead-headed for appreximately 2 hours.	Green Card, Big steam leak, Location: S.Isomax P-130A	Green Card. Co-worker backing up a truck wilhout spotier, Location; FCC	Green Card, Electrical cord without color coded tape. Locallon: RLP - Fab Shop	Green Card. Pipe sticks out, tripping hazard. Location: Pond 2 South	Green Cerd. Some grading is missing, Location: Bridge 145 on Xylone and Channel St	Green Card. Steam tracing teak, Location; SDA S. Isomax by C-130	Green Card, Need a light plant on backside of PSM bidg. Location; Gets 91	Burryng scaffold deck inside C-1750	High Chlorides in 3103
Whils installing a blind on K-270 fuel gas coalescer drain to railer, relief gas went to almosphere through cracked flange and sertivated JHT IASS alarm. In went to almosphere through cracked flange and sertivated JHT IASS alarm. The maximum IASS indicates was 6 PPM curing event. How dot railer gas go to amosphere through cracked flange? GHT off gas was routed to K-3550 Flant Gas race covery using K-242IS2 relief manifold. JHT operatives blocked in side states to covery using K-242IS2 relief manifold. JHT operatives blocked in side K-242IS2 relief manifold of K-270 blinding. JHT operatives gas teached at bleeder, system was clean, and released line to maintenance for blinding.	While installing a blind on K-270 keet gas coaleach drain to relief, relief gas went to almosphere through cracked fenge and activated 4HT H2S almost maximum H2S indicated was 6 PPM during event. How did tollef gas go to atmosphere induced nexteed fenge fight or gas was routed to K-2550 Flare Gas recovery using K-242/52 relief manifold. JHT operations blocked in side valve to relief, off gas from GHT V-1871, and relief gas to K-242/52 to Isolate K-242/52 relief manifold for K-270 blinding. JHT operations gas tested at bloador, system was cleen, and released line to maintenance for binding. Nationarro- fiftee cracked fange to exact bill lind and openator roticed rollef tine pressure was forgesting. Operator immediately asked filters to evacuate uses and all other worthers in JHT area. Operation's Itsolated K-270 relief lines with valve coming off relief header in 5 minutes or lass. When JHT operations doesd line from GHT freief. GHT origas instruct anacentrary traveled through relief into to atmosphere through K-270 cracked fineg for binding. GHT closed 4JFCG18A, V-1571 of 19gas to JHT K-242/52 and opened 4JPCG18A of the line K-250 cracked appears of the linding. GHT closed 4JFCG18A, V-1571 of 19gas to JHT K-242/52 and opened 4JPCG18A of the line K-3560 compressor. No injuries during event.	Upsal slamach due to an existing condition	Green Card. Moving scissor lift before inspection.	At approximately 0400Hrs the instrument alt supply to PCV304 on P-22 discharge disconnected from the control valve causing it to fail closed. This describe the only was boosting JP6 from the Oregon Voyager to T-1700 for approximately 1 hour.	Green Card. Saw a big steam leak by P-130A. Il needs to be fixed because it is in the walkway and esoneone could get burned.	Green Card. Co-worker backing up a truck without a spotter in a crowded area.	Green Card. Electrical cord without color coded tape.	Green Card. Pipe behind 2.South, electrical distribution sticks up in an area offen used as an area to enter Pond No. 2. Tripping hezards also sharp top could cut lower leg.	Green Card, Bridge 145 on comer of Xylene St and Channel St has some grading missing on the SW and of bridge.	Green Card. Steam leak by C-130. Steam tracing leak	Green Card. We need a light plant on the backside of PSM bldg because lots of employees are nearby and drivers cannot see them while standing in the dark near the street.	Koch: While are goughty Inside of 82 man way on C-1750 on a tray section, sing landed on the scarfield deck catching the scarfold deck on fire. Fire blanket was used but most of it was the old style.	to settle for 24 hours. At this point a transfer was required or the FCC would have shut down. A dilution plan which included a feed cut from 55 MBPD down to 55 MBPD was required to get the feed below (6 ppm?). At \$23BL, this is \$20Kdey for 6 days = \$120K.
	Employee Iriury	NL-injury/lliness - Contractor injury	NL-Lessons Learned	NL-Business Process	NL-injary/illness • Contractor injury	NL-injury/liness - Contractor injury	NL-Lessons Learned	NL-injury/IBness - Contractor injury	NL-Lessons Learned	NL-Lessons Learned	Nt-Injury/Il/ness - Employee Injury	Fire/Explosion	Quality
	(1) GHT V-1671 off gas routed to K-3950 through JHT K-242/52 roller manifold.			(1) PCV 304 felled close due to less of air supply, (2) Operator response line attowed for P-22 to overheat before cause of problem was discovered, (3) P-22 common trouble odd not elearn, ISE to inspect and prove out P-22 common trouble trouble aliam.						-		(1) improper fire blanket, incomplete containment	(1) Cargo sample was not obtained and sent to Richmond from 3rd party ferminal at BORCO , (2) Cargo was not heated on the incoming ship prior to arrival in aptie of elevated choride levels

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	24260	24259	24257	24256	24254	24251	24213	24193	24191	24 191
	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA- Refinery	Richmond, CA - Refinery	Richmond, CA - Retinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmand. CA - Refinery	Richmond CA - Refinery
	10/20/2011 4:15:00 PM	10/20/2011 12:10:00 PM	10/20/2011 3:40:00 PM	10/20/2011 2:00:00 PM	10/20/2011 5:55:00 AM	10/20/2011 3:00:00 PM	10/18/2011 10:00:00 AN	10/20/2011 3:45:00 AM	10/19/2011 11:00:00 PM	10/18/2011 11:00:00 PM
	Closed	Closed	Ctosed	Cipsed	Closed	Closed	Closed	Closed	Closed	Closed
	Loss	Loss	Hear Loss	Loss	L089	Near	Near Loss	Near Loss	Near Loss	Noar Loss
	Loss of electrical power to fibres.	uneven surface on sieging deck, rolled ankle	#7 Boiler South Rediant Well Spill Open	Entry on an Expired Permit	One contractor truck hit enother contractor pickup truck door	Small process line leak.	Green Card. Too many cars parked in the red zone, Location: Behind RLOP Centrol House	E-1548's area Hydro Blasting hose filling loose	JHT H2S alarm white	JHT H2S alarn while
MO MB	Lost FCC and Alky flare flow indication due to Electrical PM work in RLOP power center Chop. Why: Not aware of the fact that this equipment was powered from this location. Why: was not marked, SEE_Journel.	김 호급 관	The South Wall of #7 Boiler is spiit open ~6' to 6' long with a gap of ~6"to 12".	Cheven, Certified Safely: Chevron EE reported to F-1251 for final dosure to impact the noise for cleariness and reported to the Enricy Alterdard that he needed to keck inside. EE had writt he thought was all the required PPE to online, Alterdard signed him on the enry log and temoved the red tape ever the opening and times around to chear his pecket for the PPE Matrix to weigh that it was correct, at which time chewron EE thought it was only a note and standard to dimb halds. Enry Alterdard safed for thin to come back outside, Tywex was on the permit but not in the entrants possession because he didn't notice it when he tooked all it. Enry Permit was not updated since 7 days prior due to no enry and had reached 86 expraision sets. Certifier Ether tapo had been removed during hits period and had not been put back up at the time of this indident, a reaw permit had been generaled but was not at entry location yet. Both EE's involved are SSE's.		A small lask was detected in the 10° above ground carbon steel line used for routing the Hazardous Waste area's proposs water to #1 separator.	Green Card. Too many cars parked in the red zone behind the RLOP Control House equiring a serious hazard to traffic. There is a good size hump in the road a the tomeror the building that might cause a problem for the vehicles to navigate safely through the area.		e h	
	Operational Process/Procedures	ក្នុងហុវនិពទនទ	NL- Equipment/Property Damage - Equipment Damage	NL-Regulatory Compliance - Non Compliance - Company Policy	Transportation	NL-Environmental - Operational Leak	NL-kıjury/ikness - Employas İnjury	NL-injury/illness - Contractor injury	NL-Environmental - Refease	NL-Injury/Illness • Gentractor fnjury
The state of the s	(1) Loss of bower, shut off	(1) staging board made uneven surface, (2) SDS; Milipation Devices: Platform was uneven. Process knot were running vertical through the platform, equilifing wooden plants to cover the holes. Minimum regolvement was real but it realled an uneven surface, (3) SOS; Personal Protective Factors; Operator stepped on the uneven, platform. Operator did not see that the platform was uneven.		ל), Removal of the rod laps from manway, not ready to onler yet.	(1) not using spotters when driving in tight excess				(1) OHT V-1871 of gaa rouled to K-3950 brough JHT K-24752 relief manifold.	(1) BHT V-1871 off gas routed to K-3850 through JHT K-24252 teller manifold.

r Operationet r Operationet RICESTPIREEXPlosion NL-FineExplosion Injurylliness Injurylliness Injurylliness RL- Raupment/Property Burnage - Equipment Usmrage - Equipment Contractor Injurylliness - Contractor Injury	causing demage to the passenger's side of duty fig (Monitor 60A). While driving on SP hill Road by 901 tank Fire fighter side swiped a guard rail causing demage to the passenger's side of duty fig (Monitor 60A). Contract EE on LTS Piping Job noticed Pinky Finger was a little sore and swollen and thought it may be a Bug Bits. EE notified supervisor who called Waltech Red Hal Safety who called Chavron Fire Dept. for assistance.	Sore and Swollen Left Hand Pinky Finger.	Loss	Closed	PN	Retinary	
	causing demage to the passengers side of duty rig (Monitor 60A). While driving on SP hill Road by 991 tank Fire fighter side swiped a guard rigualisting demage to the passenger's side of duty rig (Monitor 60A).				10/22/201 8:30:00	Richmond, CA -	24351
OZ 5 Z RO	causing damage to the passenger's side of duty rig (Monitor 60A).	MVA on SP -Hill by 901	Near Loss	Cipsed	10/22/201 12:00:00	Richmond CA - Refinery	24346
7 Z 70	While driving on SP hill Road by 991 tank Fire fighter side swiped a guard re	MYA on SP Hill by 991 lank	Loss	Closed	10/22/201 12:00:00 AM	Richmond, CA - Refinery	24346
Z 70	While grinding in V-3208 (, with facesheld, EE (elt something in his eye.	parlice in the eye	Loss	Closed	10/22/2011 4:00:00 PM		24344
70	Laborers had been muking out the column. A light was left on in the column during turch. There was muck on the fight and it sarred to smolder	smoldering in C-1180	Near Loss	Closed	10/22/201 12:15:00 PM	Richmond CA - Refinery	24342
	A frain - F305 FSC Chopped during controlled shut down due to high fuel gas header pressure. This also shut down the HZA auxiliary burners for steam production and the 500# steem system segged causing the S/D of 8 plant for steam load shed.	F305 FSC Chopped during shut down	Loss	Closed	10/22/201 7:36:00 AM	Richmond CA - Refinery	24340
NL-Lessons Learned	·	Miss Communication at Wash Pad when Overhead Crane repairs in progress.	Near Loss	Ciosed	10/21/2011 9:10:00 PM		24330
NL-injury/itiness		Contract EE Stomach pain	Near Loss	Closed	10/ZZ/Z01 2:18:00 AM		24329
90 NL-Fire/Explosion		Fire occured in space between yent stack and R-316.	Less	Closed	10/22/201 1:DO:00 AM	Richmond CA - Refinery	24327
en Fire/Explosion		Fire occured in space between vent stack and R-315.	Loss	Closed	1:00:00 AM	Richmond CA - Refinery	24327
re NL-injury/liness Contractor kijury	Contract EE Inwing Abdonnival Pain. While in portable bathroom Chevron FI Dept was notified by Contract supervisor that EE could not get up. CFD already gratile in response to another call	Contract EE Abdominal Pain	Near Loss	Closed	10/22/201 12:10:00 AM		24326
er NL-injury/ikness - Contractor kýury	Contract EE beni down-crawl under pipe (about 4FT). Heard or felt pop upp back-shouder, EE took 1st break. Reported incident to his supervisor after break on way back to Job Site. Welliech Red Hat Seity radioed requesting eld. Chevron Red Hat Safety celled Chevron Fire Dept, who was on scane about 2 minutes to aid.	Contract EE Bent down- crawl under pipe heard or felt pop upper Back- Shoulder	Loss	Closed	10/21/201 10/30:00 PM		24321
er (njuryiliness	Contract EE bend down-crawl under pips (about 4FT). Heard of felt pop upp burk-shouktor. EE took 1st broak, Ropordad incident los the supenders after break on way back to Job Site. Wellbech Red Hat Safety radioed requesting etc. Charron Rod Hat Safety called Chevron Fire Dopt. who was on scane is about 2 minutes to abt.	Contract EE Bant down- crawl under pipe heard of felt pop upper Back- Shoulder	Loss	Closed	10/21/201 10:30:00 PM		24321
Nt-injuny/iliness Contractor injury	Wrench fe I from deck above rope inspectors	Wranch fell from deck	Near Loss	Closed	10/20/201 2:30:00 PM		24316
NL-injury/ikness Contractor Injury	Times EE was towering 4" safety from top deck of V-244 in the JHT to the ground. Chadling the Stiety with one arm and holding tope with other hand. When EE full go of Stiety the weight on the rope pinched hand between handrail and rope causing him to let go of the rope.	JHT / Pinched hand. Safety fell approx 20 feet	Near Loss	Closed	10/21/201 1:30:00 PM	-	24313
d ព្រំប្រាស្ត្រវិបាទនេ	Certified Safety: While working on V-1931 first deck contract EE was exposs to exhaust furnes from informal combustion angine. Reported a head ache	Exhaust fume exposure	Loss	Closed	10/21/201 1:00:00 AM	Richmond, CA - Refinery	24278
II N NL-Quality - Product Contamination (Int)	gasolino) from T-951. Around 22:30 operations switched the 12" wharf line irrom T1685 - 1-951, 22:35 the RBO received an idem that the level on T-95 was increasing and noticed than IT-1689 are sail decreasing. Operations were out to investigate. A [23:72] it was decovered that the 12" wharf line was one on another manifold altering approximately 901 bits of T-1606 (regular pascilina) to drop to T-981 (premium gasolina).	iradverlantly transfered 901 bbts of T-1688 regular gasoline to T-991 premium gasoline	Near Loss	Closed	10/20/201 10:00:00 PM	Richmond, CA - Refinery	24277
Tilling actor		paceline) from T-891. Azound 22:30 operations switched the 12" wharf line from T-693 - T-991, 22:25 the RBO received an elemt that lave on T-993 was increasing and noticed that I-1689 was altered that population went went by the law of the RBO received an elemt that the law on T-993 was included that I-1689 was although the 12" wharf line was open an arother mainfold allowing approximately 901 bibls of T-1696 (regular packins) to drop in 1-391 (primiting pascinar) for the pascinary to the pasci	pseuline) from T-891. Azound 22:30 operations ewitched the 12" wharf line from T-698 > T-991. 22:36 the RBD received an elemt that level on T-991 was increasing and noticed that I-1689 was suit decreasing. Operations went was received an object that I-1689 was suit decreasing. Operations went up to the level of the RBD received that the 12" what fire was open an avoibre mainfold activating any transition and the 12" what fire was open an avoibre mainfold activating associately. B01 bits of T-698 (regular pseudo Casting the Safety with one arm and hotsing ope with other hand. Avan EE to go of Safety the weight on the rope inches date of the government of the safety with one arm and hotsing ope with other hand. Avan EE to go of Safety the weight on the rope inches date of the government of the safety with one arm and hotsing ope with other hand. Avan EE to go of Safety the weight on the rope inches date of the safety with one arm and hotsing ope with other hand. Avan EE to go of Safety the weight on the rope. Whench fell from deck above rope inspectors Ontract EE bent down-crawl under pipe (about 4FT), Heard or felt pop upper parks to may back to Job Sta. Wallech Rad Hat Safety radioed requesting stock. Chevron Red Hat Safety called Chevron Fire Dept. who was on scane in 160 of the safety of the safety radioed requesting stock. Chevron Red Hat Safety called Chevron Fire Dept. who was on scane in 160 of the safety of the safety radioed requesting stock. Chevron Red Hat Safety called Chevron Fire Dept. who was on scane in 160 of the safety of the safety radioed requesting stock. Chevron Red Hat Safety called Chevron Fire Dept. who was on scane in 160 of the safety of the safety radioed requesting stock. Chevron Red Hat Safety called Chevron Fire Dept. was reason to be seen to accide the safety of the safety	Inadvertinity transfered son treating transfered was increasing and noticed that it 1-686 regular versions which the 12-wharf line above in 1-691 premium assoline to 1-691 premium another manifold allowing approximately 91 bits of 1-686 regular out to three spenium another manifold allowing approximately 91 bits of 1-696 (regular pascline). Certified Sailey: While working on V-1931 first deck contract EE was exposed to exhaust furnes from hierarcial approximately 91 bits of 1-696 (regular pascline). Certified Sailey: While working on V-1931 first deck contract EE was exposed to exhaust furnes from hierarcial combustion ungine. Reported a head exhe times from the report of the 17-where fire was exposed to exhaust furnes from hierarcial combustion ungine. Reported a head exhe times from the report of the 17-where fire was exposed to the standard part of the 17-where fire was towning 4* sailey from top deck of V-244 in the 14-T to the ground Creating the Sailey with one arm and hotsing cope with other hand. When the 18-bit of the 18-bit of 1	Glosed Loss Exhaust tume exposure Closed Loss Exha	D2022911 D2022911	Richmond, 10/20/2011 CA. Active of the service of T-969 regulær (contract EE was browning of safety / Phu Closed Less Exhaust fume exposure (10/21/2011 (cas Garden)) Richmond, 10/21/2011 CA. CA

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	24484	24494	24462	24449	24408	24390	24389	24389	24388	24365	24356
Richmond,	Richmend, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmend, CA - Refinery	Richmend, CA Refinery	Richmond, CA - Refinary	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, GA • Refinery
10/25/2011	10/20/2011 1:05:00 PM	10/20/2011 1:05:00 PM	10/20/2011 11:30:00 AM	19/24/2011 6:15:00 AM	10/22/2011 2:30:00 PM	10/24/2011 4:00:00 AM	10/24/2011 3:30:00 AM	10/24/2011 3:30:00 AM	10/24/2011 2:00:00 AM	10/22/2011 2:40:00 PM	10/23/2011 3:45:00 AM
	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Ciosed
	Near	Near Loss	Loss	Near	L Near	Hear Loss	1.055	teg)	Near	Near	5
	Green Card, Steam Leek. Location: S. Isomax, Stansion 204(S) next to Control Rm	Green Card, Steam Leak, Location: S. Isomex, Stansion 204(S) (text to Control Rm	Miscommunication between operators on opening a manway on yessel during shutdown	Particle in sye, Gate 91	Working in Unsafe Consistens	minor finger cut.	Contract EE Swollen Lower Lips	Contract EE Swollen	Contract EE near fall due to staging ladder disconnected	On 10/22 at approx 14:40 hrs the FCC totalizer was tripped.	Contract EE cul likte
	\$	Green Card Ligent Extreme Safety Concern! Reported yestorday a steam leak at Stansion 20(5) and whice dody. Shooting steam 15 yesterday to abruf 30° rodey, if seeling a tidiger hade in the pipe. My concern was shared by an operator who said the only wry! I will get fixed is to write a green card and say flow very cangerous this steam teak is and it needs repair immediately. NOTE - There was already a Work Order in the system for this issue.	20	While walking this the ethisely from Gale 31 entence, contract EE got something in his eye due to the wind, No problem was noted at the time, but when it started bothering him later in the day, he oppored the incident.	Smoke was reported coming from the first inserway of C1180 to which Chewron File Department (CFD) responded. After critiqualing the incident, CFD personnel informed Chewron Operations and Chewron Salely that no persons were allowed on the factor of that tack of C1180 out to the actients build-up and combamiliation from the suidage being semoved from the octient. (The deck and ladder were heavily contaminated with a freezy, city sludge,) Both the deck and ladder were heavily contaminated with a freezy, city sludge, both the deck and ladder were adment do sloperly be the used safely, and Step Work Authority was expercised to ensure the ladder would be cleanage before use, and the death therealter before are entiry and restart of the cleanage work inside the occlumn. CFD left the area after being ensured that the cleanup process would begin before anyone was allowed to confirms. Five (5) mindtest later, a CFD member came back to C1180 and neisead two (2) Times employees. (CFD member came back to C1180 and neisead two (2) Times employees. (CFD member came back to C180 and neisead two (2) Times omothy that used them both when Chewron Safety was questioned about this, they had given permission to Times to access the deck for cleanup. The ladder was a heavily confermated, an injury could have occurred had either or both of them slipped and feli.	Very minor out to the finger. While inspecting E-1410 contract EE finger contacted a buir.	Contract EE was working at 4Crude moving piping (demo) when the tower Ip started swelling. EE do not know if insect bite or not.	Contract EE was working at 4Crude moving piping (demo) when the lower tp started swaking, EE do not know if insect bite or not.	Contract EE was Inside V-1 100 descending a staging ladder when it disconnected and almost felf down ten feel to bellom.	On 10/22 at approx 14:40 hrs the FCC tolsizer was iripped.	While removing a control valve contract EE wrench slipped and resulted in a cut io their ign Kitis finger. The EE was keated by Chevron fite and transported to an outside ER.
NL-Operational	Nt-injury/liness - Contractor injury	Aniul eskokkuz • ssaugi/Aniuk-TN	ML-Operational Process/Procedures -	NL-injuy/ilness - Contractor (njury	Pourer I suosso 1-114	NL-Injury/Illnoss - Contractor Injury	NL-Injury/Illness - Contractor Injury	ssenikyniui	NL-Lessons Learned	NL-Environmental - Refease	เก]นารูก็หาด ระ
The state of the s				(1) EE not wearing PPE as workday had not begun. No injury to the eye occured.			(1) bug bile. (2) bug bile	(f) bug bile, (2) bug bile	(1) no call for scattoid modification	(1) Undetermined specific source from GRU-TKN-ISO relief to V705 overwhelmed single FGR compressor before second compressor could be started.	performing the task? 7.a. Wrench slippad off of the nut while applying downward pressure to remove or break the nut toose. 2 Why did this occur? 4 a. The open end of the wrench was used to bosen the bott. b. Two workers were operating one wrench a. Why years the open end of the wrench used? a. the valve body prevented the use of the boxed in portion of the wrench a. Why ware the open end of the wrench used? a. The nut was seized onto the box additional force was needed. 5. Why was the sayle of wrench chosen? a. The proper tool for the job should have been a torque wrench, hydraufe tool eld. The chosen tool was needed, 5. Why did the employee make take the short cut and make a bad decision? a. Thing the time to get the right tool would take do long, b. The tool from was to far away. c. Did not think it would happen not bim. d. Tening? a toperation.

			Green Card, Concrete has			Richmond, 10/19/2011	Richmond	
	NL-Lessons Learned	Green Card Firewalch was not wearing red vest.	Green Card, Firewatch was not wearing red yest, Location: RLP	Near	Closed	10/19/201 10:00:00 AM	Richmond, CA - Refinery	24822
	NL-Lossons Leemed	Green Card. Walking to the job site saw a big steam leak that covered two walkways.	Green Card. Big steam leak. Location: S. Isomax P-130A	Near	Closed	10/18/2011 7:30:00 AM	Richmond, CA - Refinery	24621
	NL-Lessons Learned	Green Card. Walking down LOTO to ramova spool, I nolloed the line was not locked out from bypass.	Green Card. Line not locked out from bypass. Location: Long Wharf	Near	Closed	10/18/2011 8:00:00 AM	Richmond CA - 24617 Refinery	2461
(1) What BDC edit waan't cleered Why? RLP didn't complete CAR for products shipped in error to RLP Why? RLP wear't commonicad that LSC completed CAR Why? LSC ddn't commonicate to RLP had CAR was complete.	Business Process	A loas of 4 drums of 227065982 and a gain of 4 cases of 227054967 were recorded during a physical count. On order de95704531 we need 4 cases instead of 4 drums - 6229/11. Centred plant entered the C & R on 7/6/11, R ID instead of 4 drums - 6229/11. Centred plant entered the C & R on 7/6/11, R ID cases of the country of a shorter order for possible order of the complete day and a trace on 1272 was set to the Worthouse for investigation. Response on 8/8 from the Waterbouse stated "ord not see any problem with indownd." Asked Worthouse is force Contract plant for fauther information. Waterhouse seril a trace to the Contract plant on 8/8, pot no response and did not follow up. Stock control in read contract plant did evel from 5005 and the Waterbouse with incontract plant develop to 5072 and record on 10/11. A longer contract plant did evel to 5005 centred to the Waterbouse with incontract portactions thate yet to be made and another BDC all on 9/19 for the same material cannot be corrected which is now causing an imbelleroe between DCS and SAP (MIZD).	A loss of 4 drums of 227058992 and a pain of 4 cases of 227058987 were counded during a physical count.	င် ss	() () () () () ()	10/25/2011 8:00:00	Richmond CA -	24616
	NL-Lessons Learned	Geen Card. LOTO not right. No locks on valve. Did not do job until proper procedure was followed (locks on valve).	Green Card. LOTO not right. Location: Tenk Farm T-3106	Loss	Closed	10/18/201 9:30:00 AM	Richmond CA - Refinery	24815
	NL-injuy/ilinsss - Contractor injury	Green Card. Pickup inuck passed Weld Bay enfrance at an uncomforfably high speed. This enfrance is at a nerow road immediately adjocent. It is also a blind comer from the direction inuck was heading. Two people were standing at that comer when the funck traveling 16-20 mph passed within 3 ft. Had either of the two workers stepped out a full step, they would have been struck.	Green Card. Weld Bay entrance has a blind corner when driving. Location: RLP	Neer Loss	1 Closed	10/17/2011 10:15:C0 AM	Richmond CA - Refinery	24614
(1) Pro-axisting condition	NL-injusyiliness - Contractor injury	EE had stuffed a bundle E-1112 and started to feel bed. Went to the funch tant. Someone fill the red button and CFD was on the way.	EE shaking violently	Near	Clased	10/26/201 10:30:C0 AM	Richmond, CA - Refinery	24597
(1) Inadequate labeling/identification of valve with analyzer probe inserted.	Equipment/Property Damage	C-1840 entyzer sample probe was crushed when the ladetion valve was dosed without retracting probe first.	C-1940 Analyzer sample probe crushed	toss	Closed	10/10/2011 12:00:00 AM	Richmend, CA - Refinery	24590
	NL-Lessons Leemed	Green Card, Wind sock at Calol St and Forge St needs to be replaced.	Green Card. Wind sock needs to be replaced. Lecation: CaleVForge St.	Near Loss	Closed	10/10/201 7:00:00 AM	Richmond CA - Ratinery	24586
	NL-injug/ilinese - Contractor injury	Green Card. Gloves and trash on ground in between the cars at 91 Gale perking lot making a tripping and slipping hezard.	Green Card. Trash on ground ceusing tripping hazard. Location: 91 Gate Parking	Near Loss	Closed	10/10/2011 10:00:00 AM	Richmond, CA - Refinery	24585
	NL-Injury/liness - Contractor Injury	Green Card. A Chewon operator fell when walking over a thin bad of sand caused by enoson Orahage washed out the asphal into a drain downstream. The drain cover is rusted and thin with sharp odges.	Green Card. Operator fell walking over a thin bad of sand. Location: Across from FCC Control Room	Near Loss	Closed	10/10/2011 2:00:00 PM	Richmend, CA - Refinery	24584
(1) Pairt crew foreman thought It was acceptable practice and was not aware of any new requisition regarding drying of paint.	Regulatory	Readviet an NOV dated 10/25/11 regarding the following indident: During a compliance inspection of the GMG (Jeffoc) Perth Booth area on August 23rd 2011 open containers containing coating toolvent residue were observed 2011 open contained and of iffector system. This had not been contaid outside of the paint building and of iffector system. This had not been contaid as a sconsard every prior to resenting the NOV.	Received an NOV for open paint cans	Loss	Closed	8/23/2011 12:00.00 AM	Richmond, CA - Refinary	24573
	NL-Environmental - Rolease	Contract EE Badge Atamred while Hydro Blasting E-1190 C1 at 4 Crude S/D Tumarcund. EE CK when checked on by Safely Red Het. Could not get reading from H/S Bedge as it was Reset by EE per Contract Supervisor as instructed over molorota radio.	Contract EE H2S Badgo alarmed while Hydro Blasting E-1190 C1	Near Loss	Closed	10/26/2011 4-40:00 AM	Richmond, CA - Refinery	24565
(1) Hole-walch did not stop the Chevnon employees from extenting the column without proper PPE., (2) Employees did not everturate methods to keep from losting their hardraids, (3). The group made a poor decision in deciding not to wear their hardraids, Employees did not adequately weigh at risks and violeted the entry permit requirements for PPE required to enter the column.	NL-Injury/litress - Employee Injury	C-118D became available for tilty inspection. An employae observed a small group in full PPE prepare to climb and enler the column. Belone climbing several removed the hand hate at the suggestion of one person in the group.	Several employees observed climbing and entereing C-1180 without hard hets.	Negr Loss	Closed	10/16/2011 12:00:00 AM	Richmond, CA -	24518
		and lost in the bay. Per R 5900, in order for Plant Protection to unlock the tooks Process/Procedures for us we need an NLI in the system.	Lost key for LOTO box	Neer Loss	Closed	9:00:00 AM	CA - 24502 Refinery	24502

(1) Placed hands somewhere without the right protection, (2)		EE had her hands in her pockets while she was frewatching. When she took			10/28/2011 2:15:00	真	
(1) Safety glesses allowed the spark to get into EE's eye.	Injury/liness	EE was grinding, with faceshield on, and a spark got in his eye.	Particle in the eye	Coss	10/28/2011 1:30:00 PM Closed	Richmond, 10/2 CA - 1:30 Refinery PM	24808
(1) Falling particles from elevated work area.	NL-injury/filness - Contractor injury		Foreign body in right eye	d Loss	10/27/2011 4:40:00 PM Closed	Richmend, 10/27/2 CA - 4:40:00 Refinery PM	24746
(1) Faling particles from elevated work area.	injury/liness	<u> </u>	Foreign body in right eye	Loss	10/27/2011 4:40:00 PM Closed	Richmond, 10/27/2 CA - 4:40:00 Refinery PM	24746
	NL-injury/ilineas - Contractor injury	EE was siting in the emoking post with 3 other people when his H2S monitor went oft. The other 3 did not go oft.	H2S monitor want of	Near Loss	10/27/2011 2:00:00 PM Closed	Richmend, 10/27/2 CA - 2:00:00 Refinery PM	24726
	NL-injury/filmoss • Contractor injury	Coulding Spriny: Est yested ay toward the end of the shift, started to feel some discounded is his knose. He doesn't wareantee anything that he side or have happen to him that would cause any discomfort. This morning after the All Call meeting the properties of the world has condition to his field fell who in turn motified Cherron force and the was laken to the Alliangry Clinic to be checked.	Cerified Safely, Sore Knee	Hoer Loss	10/26/2011 5-00:00 PM Closed	Richmond, 10/26/20 CA - 5:00:00 Refinery PM	24705
	NL- Equipment/Property Damage - Equipment Damage	Recleved call on radid to took at the overhead crane at the weshpad. The wire had jumped the sheve on the heardblock and wast leying between the sheves. Some contract EEs were standing on a pipe reaching out to fix the wire lodged between the sheves while the headblock & wife were being towered. Used SWA to get the right poorle art the jeb.	Washpad overhead crane cablo jumped choves	Negr Loss	10/27/2011 7:30:03 AM Closed	Richmond, 10/27/20 CA - 7:30:03 Refinery AM	24690
	NL-Lessors Learned	Green Gard White searching for someone, I noticed a truck in the lot with the social principle, when I returned about a minute faller, it was still open, and someone walked out, I asked it it was their vehicle. No, So I approached the vehicle to shut the coor and noticed it was iding unattended.	Green Card. Vehicle was idling unattended. Location: D&R parking lot	Near Loss	10/28/2011 10:00:00 AM Closed	Richmond, 10/2 CA - Refinery AM	24674
	NL-injury/lilness - Employee injury	Tripped & almost les going up stairs. Would have fallen except was holding nancral. Problem was that I was distracted & not paying proper attention to what I was deing.	Tripped & almost fell on stales	Loss	10/27/2011 4:45:00 AM Closed	Richmond, 10/27/2 CA - 4:45:00 Refinery AM	24670
	NL-injury/liness - Employee Injury		EE Right Knee Hurling	H Loss	10/27/2011 3:30:00 AM Closed	Richmond, 10/27/2 CA - 3:30:00 Refinery AM	24864
	NL-injury/illness - Contractor injury	Contract EE not feeling well. EE stated to Wellech Safety Red Hat (on way to work was not feeling well). Thought being outside in feen air would make har feel belter.	Contract EE not feeling well	Neer Loss	10/26/2011 B:59:00 PM: Closed	Richmond, 10/26/20 CA - 8:59:00 Refinery PM	24651
	NL-injury/liness - Contractor injury	IR Contract EE Pain in Left Knes. Contract EE steind: Stepped off Bus and it just copped.	Contract EE Pain in Left Knee	y Near	10/26/2011 7:25:00 PM Closed	Rictimorid, 10/2 CA - 7:25 Refinery PM	24648
(1) in a hurry	injury/iliness	white straightening a pipe stand the pipestarted to fail. EE want to catch it and scraped his hand. EE was wearing gloves and the skin wasn't broken	scraped hand on pipe	d Loss	10/26/2011 8:15:00 AM Closed	Richmond, 10/2 CA - 8:15 Refinory AM	24638
	NL- NL-pmani/Property Demoge - Equipmerd Demoge	20 10/26/2011 Electricians were troubleshooting K-9 which would not slait. At \$\overline{O}\$ 5.00 AM, while realing the internal condects on the starter liber had removed from the outside, one of the rists probes earne in condect with a live 120 VAC use and the housing. As a result, foreign voltage from a different source unknown to the mechanics was viried through the outsides of both K-9 and K-10 which share the same control power K-10 tripped off-line prompting the Electricians to immediately notify the field Operation. This firsped power source was located and teast. The 8 lock-out relay was also result and then K-10 was restered and placed back on line. Prior to restating K-10 it was requested that Operation a timent to start for with starter back in cubicle. K-9 failed to start and electrical troublestoneling continued.	Electricans tripped Mk-10 off the while working on NK-9	Near Loss	10/28/2011 9.00:00 AM Closed	Richmond, 10/26/2 CA - 9:00:05	24637
	NL-injug/illness · Contractor injury	Green Gard. Whoden walkway has delentriated wood planking. One midrall is SDA hanging loose. Natis elicking up and can cause imporig hazard.	Green Card. Weoden walkway needs repair. Location: S. Isomax - SDA	Loss	10/21/2011 8:30:00 AM Closed	Richmond, 10/21/2 CA - 8:30:00 Refinery AM	24629
	NL-injury/liness - Employes injury	Green Card. Wooden walkway needs to be repaired or replaced, Midrail's missing and neils are slicking up.	Green Card, Woodsn walkway needs to be repaired, Location; SDA Boundary	Near Loss	10/21/2011 12:00:00 PM Closed	Richmond, 10/2 CA - 12:0 Refinery PM	24627
	NL-Injury/Illness - Emptoyee Injury	Green Card There is a kig hole on sleam line with a kig leak at S, leamex next to V-153B portheast side.	Green Card, Bly hole en steam line, Location: S. Isomax next to V-153B	toss Near	10/20/2011 9:30:00 AM Closed	Richmond, 19/2 CA - 9:30 Refinery AM	24626
	NL-injury/itnoss - Emptoyse Injury	Green Card. Concrete next to Vessel 13 at FCC has rober sticking out of floor. Creates slip, trip and fall hazard.	rober sticking out. Location: FCC Y-13	Near Loss	0:00 Closed	CA - 10:00:00 Referency AM	CA - 24023 Rufurary

		Preliminanty reported by Redwood Supervisor 2 Redwood EEs, completed a			_	_	_
(1) 1. Why did "above " happen? Verification There was pressure in the ceuse time PRD Through interverwire way to the PRD Through interverwire way to be seen though 2. Why did "I happen? These was no bleeder installed on the feet system Job site review 3. Why did "2" happen? The chemical bump Arubing was field filled with no written engineering design. There was no EWO regerding installation. (2) In the past did not follow acceptable precibe and no loss occurred. (3) No written engineering plans for installation.	กในรุสไทยธรร	Nalco employee was bleeding pressure off a blocked in causilic bjection line to repair a line leak. He had on an acid suit over his nemex, splash goggles, face shield with chin cup, hard hai, acid resistant glowes, heaning protection, and safety shoes. He was releving pressure by freshing a compression fitting. Causilic aguirded out of the tubing, spreying him.	Chamical exposure at PARE caustic injection facilities	Loss	10/31/2011 8:30:00 AM Closed	Richmond, 1 CA - Refinery A	24855
(1) FSC min fire trip on F-340 Winy – fuel gas header high pressure hipped the FSC Why – an operator blind on a burner was tecking as the burner was tecking as the burner was tecking as the burner was tecked in, rutel gas header pressure went high Why – did not communicate with boand operator so they could work header pressure down Why – reacted to leaking blind without thinking one burner would overpressure header	NtOperational Process/Procedures - Plant Run Out/Slow Down	During routine burner cleaning of F340 a operator blind on a burner that was recordly put into service was found to be feaking fuel gas was blocked in to minimize that gas leakings to stmosphere. This created a high fuel gas FSC trip to min fire.	FSC min fire on F340	Near Loss	10/31/2011 12:30:00 PM Closed	Richmond, 1 CA - 1 Refinery F	24942
(1) Removed safety glasses	NL-injury/illness - Contractor irjury	Wolder working D&R LTS piping job lifted welding hood up, took off glasses and wipsed the sweat hear his eye, fill Right Eye burn and was rot sure if it was the sweat or something in Eye. Called his Safety Rad Hat as we tell everyone to report everything nor malter how small it may seem to be. Called Chevron Fire Dept. to administer bid.	Contract EE Particle in Eye	Near Lois	10/30/2011 4:15:00 AW Closed	Richmond, 1 CA . Refinery A	24844
(1) Improper PPE	NL-Injury/IIIness - Contractor Injury	Contract EE Particle in eye while Grinding pipe at 4 Crude LTS piping job.	Contract EE Parlicto in Eyo	Closed Loss	10/30/2011 3,40:00 AM Clo	Richmond, 1 CA - 3 Refinery A	24843
(1) Improper PPE	injury/iliness	Contract EE Particle in eye while Chinding pipe at 4 Crude LTS piping job.	Contract EE Parlicle in Eye	sed Loss	10/30/2011 3:40:00 Closed	Refinery A	24843
	NL-Lessons Learned	Frontifi at base of 4 Cruzie C-1160 moving tall patietized Flax Grid Packing. Fortifit was milling forward when Claneltigger was burnped-brushed in the area of Leif Call just below kines. Clareltigger was tooking up watching load of Flex Grid Packing being lifted when burnped-brushed.	Forklift vs. Cranerigger	Closed Loss	10/29/2011 10:31:00 PM Clo	Richmond, 1 CA - Refinery F	24840
	NL-Iqury/Iliness - Confractor Injury	Cell from Wellsech Sofety Red Hat that was with Contact EE in D&R &D Tumaround Lunch Yenl with Stemach Ache. Chevron Fire Dept. celled to administer etd.	Contract EE stomach acho	sed Loss	10/30/2011 12:17:00 Closed	Richmend, 1 CA - 1 Refinery /	24839
(1) The was an oily substance on the fine klariket. When the sparks were directed to the bisnict he alream of sporks sparks were directed to the bisnict he alream of sporks sparks were directed to the bisnick (2) SOS: Irailing & Procedures: Hydrocarbon nut heat been removed from the previous job area Hydrocarbon was not noticed during J-HA by weeders or alterdants, (3) SOS: Training & Procedures: Frie Report was not filled by company employee as required. Incident was dearmed minor (smoldoting only) and weld curiain was immediately put out will not any further acconsequences. The encodering lasted for only a few seconds.	NL-Fire/Explosion	TOP INVESTIGATION, FOR COMPLETE REPORT SEE ATTACHED LINK. INITIAL REPORT. EE was holding a piece of fire blankel so that grinding sparks were controlled. The blankel caught fire where the sparks were directed.	small fire 15° square	Closed Loss	1	4	24828
(1) The was an oily substance on the flire blanket. When the sparks were directed to the blanket the stream of sparks signified the blanket, (2) SOS: Training & Procedures: Hydrocarbon now well Blanket I plated. Hydrocarbon had not been removed from the previous blo eres Hydrocarbon was not not noticed during JHA by wedders or siteralants, (3) SOS: Training & Procedures: Fire Report was not filed by company simpleyes as required, incident was deamed mirror (smoldering only) and weld curtain was immediately put out willout any further connequences. The smoldering lasted for only a few seconds.	Fire/Explosion	TOP INVESTIGATION, FOR COMPLETE REPORT SEE ATTACHED LINK, NITUAL REPORT. EE was holding a piece of fire blanket so that grinding spacks were controlled. The blanket caught fire where the sparks were directed.	small fire 15" square	Closed	10/29/2011 10/45:00 AM	Richmond, CA-	24828
	NL-injuryilliness - Contractor injury	Bay Valve: 2 EFE's white working on opening up a EBV on the P-1205's, came in contact with a dissel and water intotale on their contact.	Bay Valve: 2 EE's sprayed with diesel	Closed Near	10/29/2011 10:00:00 AM Clo	Refinery	24827
(1) Hot step	NL-Fire/Explosion	During the task of are gouging inside the #2 manway on C-1500, some sparks field on some staging boards in the bottom of the column. The boards started to smolder. A Hole Notich on F-1550 reported to operations the small of burning material. Operators determined it to be coming from inside C-1500.	Smoldering Staging boards In C-1500	Clased Loss	10/28/2011 6:15:00 PM Cid	Richmond : CA - Refinery :	24822
	NL-injury/litness - Contractor injury	H2S Miontor went atf	H2S Maniter went off	Near Closed Loss	10/28/2011 1:40:00 PM Cir	Richmond. CA - Refinery	24812
not ewere of hand placement	Injury/liness	them out there was a splinter in her finger.	Loss spinler in finger	Closed Loss	PM Cit	24809 Rafinery 1	24809

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25150	25145	25067	25036	24996	24896	24968	24959
Ridmond, CA- Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Relinery	Richmond, CA - 24996 Refinery	Richmond, CA - Refinery	Rickmond, CA - Refinery	Richmond, CA- Refinery
11222011 4:40:00 PM	9:20:00 AM	. 10/31/2011 4:30:00 PM	11/1/2011 10:00:00	10/31/2011 10:45:00 PM	10/31/2011 10/45 00 PM	10/25/201 12:00.00 AM	1:00:00 PM
Closed	Closed	Closed	Clased	Closed	Closed	Closed	1: Closed
Coss	Loss	Loss	Loss	L0 33	Loss	Neer	L035
Particle in the eye	FC3074 chopped at ammonia injection system for A train SCR	Polson Oak Contact on Mechanic	Derko valve acid leak (shut down of the V-1410F settler and contactors)	Contract EE Facial	Contract EE Fadal Leceration white Grinding.	Several SSE's from the same company did not know their Mentors.	Partial finger emputation
The Officer had just completed mirroring a bus prior to entry into \$1 Gate. As she was walking back to the gate frouse and codized an initiation in her eye.	FC30T/4 chapped at emments injection system for A train SCR causing the loss of NH3 injection to the SCR. Nox emisions were high 50 about an hour betate injection was re-established and brought under control.	Contractor employee had an epparent reaction to polson oak. He was not sure when he made contact.	 Acid leak in the valve body of the derko valve, located at the bottom of the acid sotter, V-140F settine and contactor R1410 K/F; will have to be shut down and cleaned up for repair; 	Contract EE was Grinding in tight gausters when Grinder bounced, hitting and culting through Face Shield resulting in cut to Face around Left Cheak Bone area.	Contract EE was Grinding in light quurters when Grinder bounced, hitting and cutting through Face Shield resulting in cut to Face around Left Cheek Bone eras.	SSE Audit learn conducted 28 SSE audits during the week of 10/24/11 hnu 10/20/11. On 10/20/11. O	CUI tack on E-STSA and were toading their tools in the tool box attached to their funck. Tray years hying to close the sid on the tool box that was obstacled when the side side in the tool box that was obstacled when the side side in the fine side in the side side in the side some involved with the detached portion of the finger. Et was transported to the clinic with the detached portion of this finger on ice, the clinic did not treat rather transported directly to John Multi Medical Center in Vallariu Creek. Redwood Safety Representive has notified OSHA of a possible amputation and Is in route to John Multi Roblical COSHA of a possible amputation and Is in route to John Multi Roblical William (See Safety Safety).
Scout, Arrivi	Environmental	sseull/w/inl	Equipment/Property Damage	eseallly(ruin	સા–injury/itiness - Contractor knjury	NL-Lessons Learned	Injury/Itnoss
(1) The Officer was performing her regular cutiles at 91 Gate. Signing in visitors and inspecting trucks before entry into the refinety. The Officer was wearing all her required P. P. (Hard Hat, Safety Vest, and Safety Glasses). When the Officer noticed her eye was intelled she informed the lead Officer and went headed her let she saw anything, she said no but it still tests initiated she intelled Chevron Iffe to report a pessible partied in the eye. When Chevron Iffe a myred they also did not find anything in the Officer's eye but to be sure they decided to go alhead and furth her eye. They then necommend the Officer go to the clinic for further evaluation. The Officer was transported to the Chevron office and evaluated and no source of an initiation was found. It was not determined what caused the initiation, when they are considered the eye was not determined what caused the initiation was found. It was not determined what caused the initiation ould have been the source. Also the nurse said the initiation could have been the source. Also the nurse said the initiation could have been the source, and inspecting tucks before entiry inc he refinery. The Officer was porterning har regular duties all 91 Gate. Signing in visitors and inspecting tucks before entiry inc he refinery. The Officer was porterning har regular duties at 91 Gate. Signing in visitors and inspecting tucks before entiry inc he refinery. The Officer was porterning har regular duties at 91 Gate. Signing in visitors and inspecting tucks before entiry inc he refinery. The Officer was porterning har regular duties at 91 Gate. Signing in visitors and inspecting tucks before entiry inc he refinery the Officer was weening all her required LP. E. (Hard Hat, Safety Vest, and Safety Glassess) When the Common and officer and was an out of the restroom the lead Officer has a swarphing, size said from but the lead officer and was an out of the restroom the lead Officer has a swarphing, size said of the Whan Chevron Fire to raport a possible partied in the e	(1) See Journal for Investigation and findings to date - investigation engoing need to potition BAACMD for a maintenance window to troubleshoot system.	(1) 1. All poison cak had been removed prior to start of job - removal by Enyon, Residual oil likley remained in dirt and erees near by where the poison cak was located.	(1) The valve liner was mechanically damaged which resulted in acid induced corresion on the Cast CS valve body.	(1) 1. Why did "above" happen? The grinder elipped from the right hand and caused the left hand to lerk 2. Why did "1" happen? Grinder was positioned tower face with very little room to maneuver. 3. Why did "2" happen? No other position to place grinder to clean the baad 4. Why did "3" happen? 16" line was cult in a place that was adjacent to perpendicular insulated line that was 4" every.	(1) 1. Why did "above" happen? The grinder elipped from the right hand and caused the left hand to jerk 2. Why did "1" happen? Ginder was positioned lowed face with very little room to maneuver. 3. Why did "2" happen? No other position to place grinder to clean the bead 4. Why did "5" happen? To fine was cut in a place that was adjacent to perpendicular fine was cut in a place that was adjacent to perpendicular fine that was 4" away.	(1) Why: Contracting company Mentors may have been under with SSEs. Why: Mentors misunderstood role as Mentor. Why: No Mentor training was provided. Why: Mentor training was an upon of Pre-shauldown netfivilles.	(1) Current lood box cover shocks do not work - Shocks were 10 yes old and evaluating glot boxes is an tox in a maintenance checklist used when performing maintenance on the ruck - Shock rabure was perceived as a minor and non-critical repair and they have had them del in the past with no consequences., (2) No verbal Loss Prevention Salf Assessment (LPSA) was compiled between the 2 confusedors and the contractor on the passenger side eld not check that the line of fire was clear prior to shattling the local box its.

	·								
	25228	25201	25187	25185	25184	25162	25160	25166	26 150
	Richmond CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Rafinery	Richmond, CA - Refinery	Richmond, CA - Rafinery	
	11/3/2011 8:45:00 AM	11/2/2011 3:30:00 PM	10/27/2011 7:00:00 AM	10/25/2011 7:00:00 AM		10/20/2011 10:30:00 AM		1:15:00 PM	
	Cipsad	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Ciosed
	Loss	Near Loss	New Loss	Near	Nom Loss	Loss Negr	Yes:	Near Loss	500
Operator was sprayed with	Operator was sprayed with Carbon Disulfide solution on arm while filening material into a vial.	Pipe dropped while being lowered from column	Green Card, Light standard for weld bay. Location: RLP	Green Card, Steam teak, Location: S. Isomax MP- 102	Green Card, Persen driving using cell phone. Location: Lubricant Plant	Green Card. Union leaking steam a lot. Location: 3. Isomax V2531	Green Card, Steam line leaking from fittings, Location: S. Isomex P130A	Loss of Nh3 to the 2000 HRSG.	Particle in the eye
The Operator was transfering a solution of FCC Medium Cycle Oil (MCO) and Cerbon Disulfide (CS2) into a 2 mL target viral for GC Analysis. The QCO was pressure fittering the solution using a 3 mL syringe passing thru a 13 mm diameter 2 um filler. The solution was too viscous and ceused material to spray out from the syringe filter assembly. It is unknown if a portion of the CS2 splash unto the Operator. The Operator had the proper PPE and performed the	The Operator was transfering a solution of FCC Medium Cycle Oil (MCO) and Cerbon Distrible (CS2) Initio a 2 mL target viel for GC Anaylst, The QCO was pressure filtering the solution using a 3 mL syringe passing ihru a 13 mm diameter 2 mm filter. The solution was too viscours and caused material to spray out from the syringe situr as resmibly. It is unknown if a position of the CS2 splash unto the Operator. The Operator had the proper use of the stand of the hood prevented material straying onto other surfaces of the body. A major portion of the solution was sprayed on NOMEX seve and portion of the wrist of the Operator.		Green Card. Light standard for Wold Bay.	Green Card. When I tried to help a crew member setup the Job, saw a steam leak overteed that needs to be fixed before someone gets burned.	Green Card, Person was driving too fast and talking on the phone. Tried to get the drivers altention but he did not see me.	Green Card. Union leaking sleam a tot behind Tank V2531	Green Card. Steam kne leeking from fillings.	Train 2000 NH3 chopper tripped closed due to a false high high level in the tevel bridal	The Officer hed just completed mirroring a bus prior to entry into 91 Gate, As she was walking back to the gate house she noticed an irriation in her eye.
	NL-injuryillinass - Employee injury	NL- Equipment/Property Damage - Equipment Damage	NL-Lessons teamed	NL-Lessons Learned	NL-Lessons tourned	NL-Lessons tearned	NL-Lessons Learned	NL-Business Process - Business Interruption	NL-Injuryiliness -
	(1) Operator was filtering mstariel onto vial containing CS2.	(1) Had not checked the lies and demps before lowering the pipe						s (1) Have been receiving dirty "weit" NH3 from SISO causing a multiple of temperature and level swings.	(1) The Officer was parforming her regular cutes at 91 Gale. Signing in visions and inspecing necession and project in the sectors entry into the prefixory. The Officer was wearing at her required P.P.E. (Heart lat. Safety Vest, and Safety Glasses). When the Officer noticed her eye was arritated site informed the saud Officer and went inside the restroom to look in the mirror. When she came out of the restroom the lead Officer seked her if she saw anything, she said no but it still feels infalled as if samething is in it. The Lead Officer then cated Chovon free arrived they also did not find snything in the Officers eye but to be sure hery decided to go ahead and faish her eye. When the commend the Officer go to the clinic for further their standard expensive the same shaped to go ahead and faish her eye. They then recommend the Officer go to the clinic for further evaluation. The Officer was transported to the Chevron clinic and evaluation. The Officer was transported to the Chevron clinic and evaluation the Officer was possible a piece of link or even an eyelash could have been causad by a dry eye. There was no damego to the eye and the intakino was gone by the time the Officer arrived the selic. The nurse deared the Officer is return to work. (2) The Officer was possible to the eye. When the officer is return to work. (2) The Officer was possible to look in the mirror. When she came out of the restroom the load Officer rasked her it she sew enything, she said not in the eye. When the company the possible garfide in the eye, when the collect forwors fire to report a possible garfide in the eye, when the officer of the one do floor she out to be sure they set to be sure they.

https://impacterm.chevron.com/IMPACT/ANYWHERE/Reports/exports/scenario_159134_f8a5390b-1e90-4874-b012-4d17412a3a40.htm 8/9/2012

(1) Used past experience to complete task., (2) SOS: Training & Procedures: The impeller was being heated with torches. II								
	NL-Environmental - Robase	RLOP is in the processing of being started up following a Major Turnaround. The railer hadder was exposured to oxygen due to Maintenance repairs. The railer hadder was reprod with introgent for terrove oxygen, depended a corroxion) from the system. RLOP was root on Flare Gas Recovery at the time, As a result, the nirogen flow broke the 24" water seal in the flare and tipped the totalizer.	RLOP Flaro Tolafizor Tripped due to nitrogen purging of the relief header prior to startup	Near	Ciosed	, 11/8/2011 1:30:00 PM	Richmond, CA - Refinery	25471
(I) Pin hole leak, (2) Suspect cause could be CUI, need inspections to varify.	NL-Environmental - Spill	Elbow of 2 inch rips has a phrhois leak in 3.	LCO elbow leak at SDA boundary.	Loss	Closed	11,6/2011 10:00:00 AM	Richmond, CA - Refinery	25469
(1) Pin hole leak, (2) Suspect cause could be CUI, need inspections to varify.	Environmental	Elbow of 2 (nch pipe has a ph hole leak in K.	LCO elbow feak at SOA boundary.	Loss	Closed	11/6/2011 10:00:00 AM	Richmond, CA - Refinery	25469
	NL-Transportation - Contractor	Vellow paint on tumper and damaged grill, Looks like damage may have been caused by a yellow pulp and list handbe	Yellow paint on bumper and damaged gril	Near Loss	Closed	, 10/27/2011 6:00:00 AM	Richmond, CA - Refinery	25497
and the second s	NL-injury/liness - Contrador Isjury	Contest Et compilation of H2S exposure while working a 10-250 second deck. He executated the area and walked to the DER tunch lend. Et parsonal H2S monitor epipears normal and did not want off. Area JH1 H2S monitor weak off and a 10 DER areas (JH1, NH1, 4/CR/UDE) were all evacuated at Spm. Ope wall input the plant monitor giving off.	Contract EE complain of H2S exposure but H2S personal monitor did not went off	Near Loss	Closed	11/7/2011 9:11:00 PM	Richmond CA - Rafinery	25405
	NL-injury/iliness - Contractor injury	Bay Valve employee (Colemen Stevens) working at 5 CAT on control valve was bitten by an insect to his ion intumb causing his thumb to swell.	Insect bits	Near	Closed	11/5/2011 10:00:00 AM	Richmond, CA - Refinery	25316
	NL-injury/iliness - Contractor injury	EE reported tingling in his linger tips an swollen fingers.	Personel medical	Near Loas	Clased	11:16:2011 11:16:00 AM	Richmond, CA - Refinery	25315
(1) Had all required PPE on. V2G(spoggles) upgrade may have made a difference.	Injury/illness	EE working at NHT on ploing at the E-410s received a particle in the eye. Wate ginding a piece of pipe a small prace of matal got into his eye. He was wearing all of his FPE.	Paticle in eye	Loss	Closed	5:30:00 AM	Richmond CA · Refinery	25312
(1) Had all required PPE on, V2G(spoggles) upgrade may have made a difference.	Nt-injuryillness - Confractor injury	EE working at NHT on piping at the E-410s received a particle in his eye. Vahie ginding a piece of pipe a small piece of metal got into his eye. He was wearing all of his EPE.	Paticle in eye	Losa	Closed		Refinery	25312
(1) Fallure to ensure proper Isolation between 150# steam reader and raifol source	NL-Operational Process/Procedures - Safey Systems	Al 1920 HSS sensor activated atom Al006 (nast P-1925 in GRUI19 plant) that H28 was present. At was operators and CFD/hep investigated and found 314* bleader open near V-1909 under control valve (inquir pudits at grade). Operators and contractor near 1376 plant natice an oder of Reliat, Hydrocarbons and fallt) (gasoliar valpor invospitout viter plant. Operations move from a control by plant vaporallous) for sounding the evacuations siten. It Gasoline vapors were venting from med pump condensate valve pacting in 1316 plant also gasoline and water was drained from the based; Operations venting and 204 and 1626 shear men domesmate at GRU bourdays, office of Resistific Al Gasoline dissipated before gradually disappearing along altogather.	AI 19.20 H23 sensor activeted (20 FPA) alarm Aitod (near F-1925 in GRUIF splant) that H2S was present. Are opendors and CFD/rop investigated and found bleeder open near V-1910.	Loss News	Closed	774	Richmond CA -	25311
	Nt-Lessons Learned	Needed Io unlack take \$2089, IMI needed to stroke/ check MOV's for P-1101's	Needed to unlock MOV locks, asked for lote key # 2088	Loss Near	Closed	11/5/2011 9.09:00 AM	Richmond CA Refinery	25307
(1) EE not aware of surroundings	รรษบรูนภักโบ	EE was working at the NHT doing ground support. His task was to clean up the trash from the fir fan decks (E-412s)wast side. There's a scarbolding that runs approx 40 rong and 412 ft high that he tab do work under. AT some piont he stood up making contact with scarbold jamming his neck.	Contract EE stood up hitting hard surface kinking his neck	Loss	Closed	11/5/2011 1:30:00 PM	Refinery	25306
(1) EE not eware of surroundings	Nt-injury/liness - Employee injury	EE was working at the NHT doing ground support. His task was to clean up the treat from toe fir fan decke (E-4/23)west side. There's a sooffolding that runs seprex of to high and 41/21 high the late by work under. AT some plant he stood up making contact with scaffold jannning his nack.	Contract EE stood up hitting hard surface kinking his neck	Loss	Closed	11/6/2011 1:30:00 PM	Richmond CA - Refinery	25306
	NL-Business Process - Business Interruption	The Operator was unable to open the Lock #0043 because there was no lockbox with a key neetby. Openforts unable to locate key.	Losi key for Operator lock #0043 at T-3159 waterdraw	Near Lass	Closed	11/5/2011 11:00:00 AM	Richmond CA - Refinery	25305
(1) Tree trimming 8st given to Facilities end of July but tree trimmore didn't show up until mid November.	Equipment/Property Demogo	Power outgre occurred when 12 KV. Tie Aine 1 (12-57 breaker) and Pt. Orient Feeder (12-56 Breaker) opened due to fault ourrent affecting SP HII / Main Tank Field, 17 Pump Station, RIE (tank data), and Administration Building.	Pt. Orient Feeder 12 KV Power Outage.	Coss	Closed	11/3/2011 1:45:00 PM	Refinery	26280
(1) Operator was filleding material ento vial containing CS2.	injury/IFness	transfer inside a tume hood. The proper use of the seath of the hood prevented material soraying onto other surfaces of the body. A major portion of the solution was sprayed on NOMEX sleve and portion of the wrist of the Operator.	Cerbon Disulfide solution on arm while filtering material into a vial.	Loss	Closed	d, 11/3/2011 8:45:00 AM	Richmond, CA - 25228 Refinery	25228

N	, .		N	,	2	2	N	2	Na	NJ.	2	N	N
25619	25619	25589	25572	25571	25 <i>57</i> g	25567	25666	25565	25563	25551	25559	25551	25517
Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmend, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmend, CA - Relinery	Richmend, CA - Refinery	Richmond, CA - Rofinery
11/9/2011 1:15:00 PM	11/9/2011 1:15:00 PM	11/9/2011 10:19:00 PM	11/2/2011 12:30:00 PM	11,/3/2011 10:00;00 AM	11,2/2011 8:30:00 AM	11/1/2011 2:30:00 PM	11/1/2011 3:60:00 PM	10/31/2011 10:00:00 AM	10/30/2011 2:15:00 AM	10/27/2011 4:30.00 AM	10/26/2011 10:15:00 AM	11/7/2011 7:00:00 AM	11,9/2011 5:00:00
Closed	Ciosed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	C O S S d
	Loss	Near Loss	Near Loss	Near Logar	Logg	Near	Near	Near	Near Loss	Xear Loss	Near Loss	L0 33	Loss
Ankle Sprain	Ankle Sprein	Last LOTO Key 2004	Green Card. "Safety Suggestion Only" - Oily Gloves, Location: D&R 4 Crude Plent	Green Card. Valve leaking r steam. Location; D&R F- 3550		Green Card, Missing windsock, Location: Tank 1633	Green Card. Contractor unsafely towing weld machine with forkiff.	Green Card. Found a leak on gauge (fuel gas). r Localion: S. Isomax F- s 340A	Green Card. Broken weld r on guard rail, Location: D&R C-1100	Green Card. The wood deck is loose, Location; #1	Green Card. Meny handrails that are loose. Location: #7 Pump Station	safety cartidge lipped	Impeller broke white
Worker was coming down scaffolding stairs. As he stopped with right foot onliast step, he "naid" his andies, kwelling it and immediately fell intense pain. His co-worker, Justin Walter, (rowe him to the Chevron Fire Station #60 where he was met by UST Services. Stafety Manager Jin Jestiam and was axemined by Chevron Fire FightersEMT's, Worker was seen at Chevron Medical Clinic and was transported to CorrolnSite (at clinic's request) in Martinaz, CA for presentionary K Rays. X Rays were registrate and worker was released to Regular work status effective immediately. THIS INJURY IS A FIRST AID CASE ONLY.	Worker was coming down scaffolding stairs. As he stepped with right fool onto last step, he 'rotled' his enkle, hisbiding stairs, the he stepped with right fool onto last step, he 'rotled' his enkle, the whole his he haven fire Staiton 850 where he was met by UST Services Safely Manager Jim Jaskam and was examined by Cheuron Fire Splites/SEMTS, Worker was seen at Cheuron Madfaci Clinic and was transported to CareOnSte (at clinic's request) in Martinez, CA for precaultorary X Rays. X Rays were negative and worker was released to Regular work slabus effective immediately. THIS INJURY IS A FIRST AID CASE ONLY.		Green Card. On several occasions I found contractors wearing oily gloves when ddriking water from the cooler, I found greasy gloves and dirty rags sitting on top of the water igloo.	Green Card. Top deck of F-3550 by the steam drum there's a valve leaking steam.	Green Card. Seen a fordift carrying a six pack of fresh air with only the forks.	Green Card. Tank 1633 has a missing windsock and no other windsock in sight.	Green Card. Wilnessed a contractor unsafety lowing a weld machine with forkelf. Forkitt eventually fell off forks.	Green Card, While working on a furnace, F340A, found a leak on gauge (fuel gas).	Green Card. While coming down from C-1100 I noticed some broken weld on guard rail file tears)	Green Card. At #1 Fump Station the wood deck is loose and has been removed many times.	Green Card. At 7 Pump Station there are many handrals that are loose. It is mostly wood handralls.	While cuting plexiglass on table saw, safely device tripped, causing saw to be tunusable unlik relplacment cartrage can be bought.	TOP INVESTIGATION impeller was being removed from the balance mandrel. During the heating process impeller broke into three pleces. No mechanics injured
injury/liness	NL-injury/linass • Contractor injury	NL-Business Process - Business Process	NL-Lessons Learned	NL-Lessons Learned	NL-injury/liness - Contractor injury	NL-Lessons Learned	NL-injury/limess - Contractor injury	NL-Lessons Learned	NL-Lessons Learned	NL-Injuryiliness - Employee injury	NL-injury/illness - Employee injury	Equipment/Property Damage	Equipment#reporty
(1) Employee was unaware of his surroundings. Employee	(1) Employee was unaware of his surroundings. Employee was unakentive to his work activities.											(1) saw shut down due to safety trip	for balancing. (3) SOS.Design & Engineering: There is no warning on Machinit Manual to not heat the impalar. (4) SOSebar Issue, Design & Engineering (Design & Engineering (Design & Engineering (Design & Engineering Vostin). The Engineering of Equipment): - Crack in original impallor. The impalier mail was on the plump when it was earl to the Machine Shop had a full length crack in the bore (about & inches ind) approximately 150 degrees opposite of the heyway and had propagated ride to balance hote Meritaliurgy of new impelier, The impelier was made of white heat treated cast licen (excerding to the OEM). This metalturgy creates a hard, brittle material.

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	25732	25708	25654	25054	25040	25640	25638	25631	25629	25628	26627
	Richmond CA - Refinery	Richmond CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA -	Richmend, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond CA - Refinery	Richmand CA - Refinery	Richmond, CA - Refinery
	11,5,201 t 10,00,00 AM	11/11/2011 9:30:00 AM	11/3/2011 1.00:00 PW	11/3/2011 1:00:00 PM	11/10/2011 6:28:00	11/10/2011 9:45:00 AM	11/2/2011 2:00:00 AM	5:00:00 PM	11/8/2011 2:00:00 PM	11/8/2011 1:30:00 PM	11/8/2011 1:30:00 PM
	Closed	Closed	Closed	Closed	C	Closed	Closed	Closed	Closed	Closed	Choeed
	Near	Near	Hear Loss	Near Loss	(093	L05\$	Logs	Loss Near	Near Loss	Coss Near	Near
	Double Block and Bleed clean up manifold fell to ground	Missing LOTO Keys	Loss of power to Data Center	Loss of power to Data Center	Loss of 800# sleam production due to water entrepment the fuel gas.	While regolizing a turn onto Quarry Road from Main Tank Field road a Sub-Contract Hauler clipped a pickup truck coming down Cuarry Road just past the slop sign.	E-142A Tube Leak	H2S menitors alarm	Green Card, Bridge Is deterforating, Location; Bridge 145 neer Gata 31/Scales	Green Card. A Vault Box has a broken weight-rated lid. Location: 3 Substation parking area.	Green Card, LOTO was not properly documented. Location: 3 Substation
At approximately 11:00am on 11:5/2011 operations white setting up the DAO and of SOA for dryout circulation unblocked 87LC126. This separated the DAO/Solvent Courne C125(Full of Pentana at that time) from the DAO/fash tower(Full of LCO per procedure. This effectively laft one block velve	Cirevorr. EE was disconnecting a 3/4 inch clean up manifold and hose used for plant clean up on the first deck below V-1920 and V-1950. EE dropped he manifold on the deck, which was warped and the manifold bourced and landed in a way that allowed it to go over the loe rail and fall to the ground batween the vessel foundation and F-1922 No one was in the area at the time but EE's working on C-1910 noticed the incident.	2 LOTO boxes, 1989 and 2063, used for isolation of the NHT reactor system for a shutdown are missing. LOTO was established —I wasks ago and as the system has been deklord the keys cannot be found, P-410, needs to be unde	Short power outago is Richmond Refinery Data Center - A/C units did not come so when power outage ocumed. Power outage was due to a transformer mailuration etsewhere in the refinery.	Short power outage to Richmond Refinery Data Center - A/C units did not come on when power outage ocurred. Power outage was due to a transformer maffunction elsewhere in the refinery.	The Cogeneration plant is equipped with auxiliary DUCT burnes that are used for pressure control and dennatics on the sitherly SGMs steem system. Those Duck burnes are fixed with Refinery had goes that is supplied from the #1 Power Plant via #6 F.G. that The F.G. enfects the Cogen plant and opposes through a F.C. draw v.5200, before it pesses on to the Duck burner ownersh. This K.O. draw v.5200, before it pesses on to the Duck burner ownersh. This K.O. draw v.5200, before it pesses on to the Duck burner ownersh. This K.O. draw v.5200, before it pesses on to the Duck burner ownersh. This K.O. draw v.5200, before it pesses on the the Duck burner ownersh. This K.O. draw v.5200, before and The Refine St. During this perious in modern and STD. V.E. were supplying Cogen and The neighboring plant via #5 F.G. line from #1 P.P This was a very rare anatholding situation that required an orbana to the #1 PP/Cogen 16, it only involved opening a normally dosed varte to the resignation plant via with the situation for weeks, with no impact to other plant. The neighboring plant two coses out block valve, as they were now or their mormal supply of the! When we closed this block valve, this is when a new face in the program of the Book valve with a they were now or their mormal supply of the! When we closed this block valve, this is when a new face in the 150 the Cogen Out Burners. This bas of theal to he cogen the Refine August on the Book valve was of theal to he cogen the Refine August of the Book valve of the stream of pressure on the 800 valum and activities of pressure on the 800 valum and activities of pressure on the 800 valum and activities of the pressure on the 800 valum and activities of the pressure on the 800 valum and activities of the pressure on the 800 valum and activities of the pressure on the 800 valum and activities of the pressure on the 800 valum and activities of the pressure on the 800 valum and activities of the pressure on the 800 valum and activities of the pressure on the source of the stream of	While negotating a turn onto Quarry Road from Main Tark Fled Road a Sub- Contract Keufer cipped a pictury house coming down Quarry Road just past the slop sign. The Pickup Driver (Chevron Operator) stepped at the stop sign and puted forward to give the Truck Other more chearance to make the turn. When the Truck Other made the turn he dight realize the Operator stopped his vehicle until it was too late, as a result the dump fruck of pped fire rear end of the Dickup.	The area spentorneised a hydrocarbon color coming from the steam of the non-condensable seen from E-142A on his round. He coffeded condensable into a bottle from the drain off the non-condensable went to the ground near V-142 a used a gas tech & got a LEL of 5, 142S of 3, CO of 8ppm in the bottle's headspace. The Head Operator and STL confirmed the gasoline odor on the ground.	a Personal H2S alarms went off dwing a scall air job. They were bollewelch and stand by personal.	Green Cerd. Brought to my attention by co-worker that a bridge is devertorating and needs maintenance.	Green Card While pulling into parking area near jobsite, noticed a vault box has a broken weight-rated lid.	Green Card Write auxiling a crew who was pulling a large supply wrie to an existing reactor, discovered LOTO was not poperly documented with a CVX JHALLISV form. Aution had been completed but not documented. Additionarly, there was no lock box present for single point isolation LOTO.
	NL-Injury/Illness - Contractor Injury	NL-Operational Process/Procedures - Safety Systems	NL-Business Process - Business Interruption	NL- Equipment/Property Demage - Equipment Demage	NL-Operational Process/Procedures - Safety Systems	Transportation	Equipment/Property Damage	NL-injury/liness - Contractor injury	NL-Lessons Learned	Nt-Lessons Learned	NL-Lossons Learned
	(1) Improper Killing/Towering				(1) Excossive entrapped liquid in the FG line to V\$200 Gagan	(1) There was mis communication between the two drivers as the Dump Truck Driver was making the turn onto Query. Road from MTF Road. The DT Driver assumed the Driver of the pickup was spileg to cralinue moving around the bend but, instead he stopped.	(1) E-142A luba laak				

	25888	25885	25885	26871	25842	25833	25776	25763	25760	25742	25735
Richmond, 10/13/2011	Richmond, CA - Refinory	Richmond, CA - Refinery	Richmond, CA+ Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA v 25763 Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmord, CA - Refinary
10/13/2011	11/14/2011 5:50:00 PN	11/14/2011 5:53:C0 PN	11/14/2011 5:53:00 PM	11/14/2011 3:10:00 PM	11/11/2011 12:00:00 AM	11/14/2011 10:20:00 AM	11/13/2011 7:50:00 PM	11/13/2011 12:00:00 PM	11/13/2011 2:00:00 AM	11/11/2011 6:50:00 PM	11:5/2011 11:50:00 AM
	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
_	Loss	Loss	Loss	Loss	Loss	Near Loss	Near	Noar	Near Loss	Loss	Loss
Green Card. Three 2" lines need to be supported.	Operator first aid factal burn due to fire	Fire at 4CU K-1165 residuum fiters	Fire at 4CU K-1165	Mule ears on Southwest comer of F-1 180 (5th pass) flared up, approximately 36-40" in diameter,	K-1600, missing gasket on a 4' 1500# RTJ flange	Need lock 1059 unlocked. Key missing	F-3901 fare totalizer activity with visible flame	Off test amylene stream in FCC resulted in Alby plant feed rate reduction	Wrong LOTO lock installed on valve. Unable to find key, LOTO lock #0500 needs to be unlocked or cut on.	While back washing E-138 lost vacuum to E-135 causing PC-100A to pen to relei	During SDA 100 module startup Pentane was slowed to enter the DAO side and routed down 10 ter line to T234
	Operator received 1st and 2nd degree facial burns due to radiant heat from K- 1185 file.	While switching K-1165 residuum filers a bleeder leeked hydrocerbon and caught file.	White switching K-1165 residuum filers a bleeder teaked hydrocarbon and caught fire.	Mule ear had slight dip caming from the Scultwest corner of F-116D, pass 5. Steam Hoses will labre altached was in place to control potential flare up. Steam harse in service at 07-30 hrs., Operations called in flare up. 41.67.0 hrs altempt made to increase steem in order to small out flare up. Hoses not alterning steam to flow though, free axingstabars used to anuff out flare.	Bay Yelve: Gastel not installed on K-1900 Bind List, 4" 1500# RTJ flange. Flange Log and Lob Convoled Farm submilling by Controlled romaining the Indowate Information: Gastel size and type; 4" 1500# RTJ. R number and composition was not noted. Applied longue 460fp per GEN-5208 and verified by By QC.	Thera is no key for lock #1059 at 2 locations on the 15° LSFO TL. These locks have been on for a long parted of time.	F-3901 faing event with visible flame for less than 15 minutes due to additional relief gases overwhelming FGR relief compressor K-3950. Additional relief gases were from V-1175 akim line.	At approximately 1200 on 11/13, the FCC CBO noticed that the test results for the emylene stream indicated 10% CBs in the CS stream, maximum C6 content is limited to 2%. The FCC CBO informed the Alky CBO operator of the high C6 content and the decision was made by the Alky 18ad Operator to initiate procedum ALKE-65; response to high C6 content in the amylene stream. Feed raiss to the Alky plant were reduced as a result.	The LOTO box that South Isomex used for the Hydrogen export valve to RLOP had one lock that did not belong with that box, and that lock was installed on the doyn where. Can not locate the key.		separating the two columns, this strige block varie (chicil) was found to be leaking by based on plant livels? Ops confined to by to checkled the back end white afterniting to Trouble shoot the orbit. This went on for several hours, Ops was controlling beveil in the DAO bystem by opening PC2534 which dumps to the 10 at line, Nightshift came in set after several more hours SD the dropout circulated. Since the several more hours SD the dropout circulated. Since the several se
	injury/iliness	Loss of Containment	Fire/Explosion	Fire/Explosion	Quality	NL-Business Process - Business Interruption	NtErwironmental - Release	NL-Operational Process/Procedures • Plant Run Out/Slow Down	NL-Operational Process/Procedures - Safety Systems	Operational Process/Procedures	Operational Process/Procedures
	(1) Burns caused by unexpected fire.	(1) The Strift Turnover between personnel was inadequale and did not cover all the necessary information, (2) None of the existing Joh Alds specifically addressed the work that was being performed on the Vacuum Residium Fillers, (3) The being performed when the vacuum Residium Fillers, (3) The beder valve that was used to vent K-11656 was not closed prior to backing slock into the Filler, (4) The Riphling in the area of K-1165A/B was perceived as insufficient	(1) The SMR Turnover between personnel was inadequate and did not cover all the necessary internation, (2) Nono of the existing Job. Aids specifically addressed the work that was being performed on the Vicarium Residium Fillers, (3) The blooder valve that was used to vanik (1958 was not closed prior to backing stock into the Filler, (4) The lighting in the area of ik-1955 was personed as insolitionin.	(1) leaking mule ears	(1) Lack of focus, not verifying the work done previously.			(1) No mention of moves made on column or sample results showing high C6's in filemaker turnover, (2) Multiple crewshead operators saw high C6 sample traults and look as false results without repeat sample, (3) Move made on column to reduce reflux but no other indications looked at lo confirm change in column operation had desired effect other than one indication that had gone bad		(1) Problem Statement (What is the key issue that needs to be addressed?): E-135 simpspheric safely lifted FIVE WYY'S. 1. Why did "above" happen? Verification Bucause of two many non condenneables in the system Z. Why did "1 happen? The hogging jet sucked in all into the system 3. Why did "2" happen? The proportion give was not put into service correctly 4. Why did "3" happen? Steam was not opened to jet prior to commissioning the jet, 6. Why did "4" happen? Teccedure was not followed. 6. Why did "4" happen? Training or refsunderstanding of the procedure.	(1) Leaking orbit block yelve off C-126, (2) SDA Startup Procedure does not warn of pentana contamination down the

							- 1										
	26039	26039	25953	25952	25951	25950	25949	25945	25944	25943	25942	25941	25938	25935	25934	25923	25921
Richmond, CA -	Richmond, CA - Refnery	Richmond, CA - Refinery	Richmond CA - Refinery	Richmond CA - Refinery	Richmond, CA - 25951 Refinery	Richmond CA - Ratinary	Richmond CA Rafinary	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA · Refinery	Richmond. CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	CA - 25921 Ratinary
11/18/2011 5:20:00	11/18/2011 8:15 00 AM	11/16/2011 8.15:00 AM	11/8/2011 12:00:00 PM	11/8/2011 8:00:00 AM	7:00:00 AM	11/8/2011 7:15:00 AM	11/8/2011 7:30:00 AM	11/8/2011 4:30:00 PM	11/7/2011 12:00:00 PM	11/7/2011 1:30:00 PM	11/3/2011 8:00:00 AM	11/3/2011 1:00:00 PM	11/2/2011 4:30:00 PM	10/31/2011 4:00:00 PM	10/28/2011 8:00:00 AM	11/15/2011 7:00:00 AM	7:00:00 AM
	Closed	Closed	Closed	Closed	Closed	Closed	Clased	Closed	Closed	Closed	Closed	Closed	Closed	Ctosed	Closed	Clased	Closed
Near	Loss	Loss	Near	Loss Loss	Loss New	Near	Near	Near Logs	Near	Near Loss	Near Loss	Near Loss	S Near	Loss	Near	1.055	Loss
F-3901 flaring visible flame white opening HEL H2 to	Fire Water Line Rupture	Fire Water Line Ruplure	Green Card, An argon bottle Jeff in the unit after shuldown, Location: S. Isomax A Train	Green Card, Overhoad steam leak needs to be tixed, Location; S. Isomax SDA 50' South of C-126	Green Card. Bad eleam leak, Localicn: S. Isomax P-130	Green Card. Sleam leak from C-130. Location: S. Isomex, backend or south side of C-130	Green Card, Two steam leaks, Location: S. Isomax SDA 20' South of 126i	Green Card, Conduit sticking out the back of truck bed. Location: Contractor parking lot	Green Card. Sleam teak on 8" pipe. Location: Near tank 3108 boundary.	Green Card, Some of the grading around burners to bent and loose, Location; 4Cat F-3550	Green Cerd, Some grading is missing on south end of Bridge 145. Location: Comer of Xylone/Channel St.	Green Card, Muliple leaks on 3/4" piping on 150b steam Location; SDA at pillar YM-A-4	Green Card. A water cooling tower was leaking. Location: FCC Cooling Tower	Green Card. Truck came around comer too fast. Location: Behind Boller Shop	Green Card, Porta pottys are very dirty. Location, 91 Parring by Tool Trailer	Loss of Quarry Feeder (parlion)	Near Location: Pipeway West of Loss Dresser Rend
While opening HEL H2 to K-900's due to sagging Fenhex pressure, H2	Fire Line rupture occurred in Main Yard area of refinery white preparing to perform fire water flow (sels.	Fire Line rupture occurred in Main Yard area of refinery white preparing to perform file water flow lests.	Green Card. An argon bottle loft in the unit after a shutdown didn't tie down with ohan or wire. Someone did lie down but with rope.	Green Card. Overhead steam leak reeds to be fixed because it's teaking out steam very had. We need someone to took at the fine to see what needs to be done or write a work order so someone can fix them.	Geen Card. When I walked out to centrol room and walked to P-126, i couldn't get to the other side because steam leak so bad and II's hard to see the walkway.	Green Card. Steam leaking out bad from C-130. We need someone to walk the job in SDA and write work order so someone can fix thom.	Green Card. We found two mare steam leaks of the same location and it needs to be fixed because it's blowing near the eye level and someone will get burned If not fixed.	Green Card Pickup parked with condult sticking out of the back of bed. This could be a hazard in the early morning hours. Should have yellow caution tepe fied to conduit.	Green Card. Steam leak on 6" pipe near Tenk 3105 boundary.	Green Card. Some of the grading ground the bottom of the burners is bent and was knose.	Green Card. Some grading is missing on south and of Bridge 145.	Green Card, 3/4 piping on 150b steam - multiple leaks welst and head high.	Green Card. A water cooling tower was leaking from the flame up about 30' on the back side.	Green Card, "Blind Comer". Was driving behind Boller Shop when a delivery truck came around the comer too fast.	Green Card. The porte pollys are very dirty.	Electric fauti. A wtro jumper felied on pole 122. Occurred on an open alk, 12,000 voli circuit ((Quarry Feeder).	Green Card. Three 2" lines need to be supported. Just handing loose in pipeway.
NL-Environmental ·	NL- Equipment/Property Damage - Equipment Damage	Equipment/Property Demoge	NL-Lessons Learned	NL-injury/iliness - Employse injury	NL-Lessons Learned	NL-Lessons Learned	NL-Lessons Learned	NL-injuy/iliness - Contrador injury	NL-Lessons Learned	NL-Lessons Learned	NL-Lessons Learned	Nt-Injury/lithess - Employee Injury	ML-Lessons Learned	NL-Injury/Illness - Contractor Injury	NL-Lessons Learned	Equipment/Property Damage	NL-Lessons Learned
	(1) Many sections of the fire line are did carbon skee pipe that suffers from tinemal carciaire. Other tines these lines experience failures when expendence failures in the system failures that system pressure during flow lessis.	(1) Many sections of the fire line are old carbon size pipe that suffeat from infernal compation. Otton linnes these lines expendence failures when awapsed to the increased pressure during flow lessing. Keeping he tank open to the system limits the system pressure during flow testic.														(1) copper carrosian	

	NL-Operational		Breaker tripped causing a	_	2011	Richmond, 11/19/2011	Richmor	
(1) Operator used an erm cutting litting motion to lift the load and put full load on bloop	NtInjuryilliness - Employee injury	Operators were partorning tuton a over speed the backs on TP-740 This was the 3rd time the lever was tripped. On the first two leps two operators worked together to pulsed up on testel neer. On the 3rd top tress EE trifad up resel tower himself with right hand folt a shock sensation in fold of elbow. Let go of lever shreaf with right hand so complete reset. Came into hydro control touse and let the abore operators complete reset. Came into hydro control touse and reported it to the STL.	VAnile resetting OST EE experienced pain in rignt elbow	Loss	2011 Closed	d, 11/18/2011 1:15:00 PM	Richmond, CA - Refinery	28200
(1) Operator used an arm curing lifting motion to lift the load and put full load on bicep	ักาู่นาร/กิฟกอรร	Operations ware performing butche over speed trip checks on TP-740. This was the 3rd time the lever was fripped. On the first, two lips kno operators worked together to pulled up on reset lever. On the 3rd trip reset Et lifed up reset lever. On the 3rd trip reset Et lifed up reset lever hared felt a shock sensation in fold of elbow. Let go of lever and let the silver operatures complete reset. Came into hydro control touts and reported it to the STL.	While resetting OST EE experienced pain in right	Loss	2011 Closed	d, 11/18/2011 1:15:00 PM	Richmond, CA- 25200 Refinery	26200
(1) There were two GUS stations that needed to have their strotteds updated, only one GUS station was updated since. Network Administrator was undeformed that other GUS station had a storted. Documentation has been corrected to show the correct environment and setup.	NI. Businass Process - Business Process		Refinery Bland Recipe	Z Dong) DOI11 Closed	1,11/17/2011 1,00:00	Richmond, CA.	26188
(1) Papy quality tool.	โก _ร ุ่นารู/ใใก อ ธร	Mechanic was using a crow's toot wrench to remove a bolt When the mechanic pitted on the wrench the wrench snapped and the mechanic hit his wrist on a nearby valve causing a taceration to the right wrist. EMT's were causing a taceration to the right wrist. EMT's were called cut and the mechanic was taken to the clinic for further evaluation. Clinic release mechanic back to work with no restrictions.	Machanic was using a crow foot wrench and wrench snapped causing faceration to his erm.	Loss	0111 Closed	d, 11/19/2011 9:50.00	Richmond CA - Refinery	26169
	NL-Operational Provess/Procedures - Plant Run Out/Slow Down	PSSSR is a redundant (audrit) process mandated by law and reinforzed by OE to ensure that certain activities have been completed. Before a PSSR can be completed, Operators are required to walk a system and "yelfaw like" and stign a PSID. This is then transferred to a master copy binder, which they also have to sign. There is no formal procedure or job act for this process. The process thas changed several times throughout the RLOP 2011 Mojor Turnarrand. These trianges have conclused many scappic on this process. Several systems were PSSR of without yellow lined PSID's turned in, knore than half of 19 Plant's yellow lines were missing, and weren't transferred into the master copy binder. Yellow the several missing, and weren't transferred into the master copy binder could like the system was uranting, Most are still unspired in the master copy binder. It was decided to forgo the yellow inting process, taking only an operator's word trait he system was waked and traited. This means that operator's CAL and then would be marked on the master copy. It seems have to be fracted down at it after time to sign the master copy. It seems like the PSSR process is along reshad, Vhet is the weak! Inst could hoppen? Something pould be missed that can cause liquir, death, or demage to equipment. Do it startey or not at all. We met do have a formal procedure for yellow kindre, and bow it its into the PSSR process.	Ysliow Line process has	Near Loss	0011 Ciased	11/16/2011 3:00:00	Richmond,	26145
(1) Lack of visibility or a spotter	Equipment/Property Demago	Cherry Picker's outrigger struck PRD outlet pipe on TP-1402A white comming up to move.	Cherry picker autrigger struck PRD pipe	Loss	2011 Closed	d, 11/16/2011 7:00:00 PM	Richmond, CA - Refinery	26077
	Release	overpressured relief system and caused flating.	Loss K-900's.	L	Closed		26072 Refinery	260/2

				-	,			•
	NL-Injury/Itinoss - Employee injury	Green Card-The grafiny on the south side of T-3106 next to 30" 1509 valve needs to be clamped down. It is currently unsafe to walk in their area.	Green Card-Missing Grating	Loss Loss	1/14/2011 2:00:00 Chased	Richmond, 11/ CA - 12:0 Refinery PM	26456 B	
	NL. EquipmentProperty Damage - Equipment Damage	a section of the ras in which he bridge pane! ction that is	Green Card-Panel missing on Bridge	Near	11/9/2011 7:00:00 AM Closed		26465 R	Τ
	NL-Environmental - Sp≹	ğ	Green Card-Acid Spilled to Ground	Near Loss	11/36/2011 2:00:00 PM Closed	Richmond, 11/ CA - 2:0 Refinery PM	26482 F	1
	Nt-Transportation - Contractor		-	Loss Loss	11/16/2011 6:05:00 AM Closed	20-	26461 F	T
	NL-injury/ithoss -	Green Card-Co-workers working at Alky unit in the yellow line zones without took shields and goggles on. They only wore safety glasses		Near Loss	11/15/2011 1:15:00 PM Closed	Richmond, 11/1 CA - 1:18 Refinery PM	28454	1
	NL- Equipment/Property Damage - General Lisbilly	Green Card-Bridge #145 off Xyleno and Channel St, grating is bad and in need of repair.	green card—Bad Grating	Near	11/14/2011 11:00:00 PM Closed	Richmond, 11/ CA - 11: Refinery PM	28450 F	1
	NL-Business Process	green card-The stop sign across Standard Oil swithching station off Xylene St is extremely feded and needs to be replaced.	Green card-Need new Stop Sign	d Loss	11/10/2011 2:15:00 PM Closed	Richmond, 11/ CA - 2:11 Refinery PM	28445 F	T
	NL- Equipment/Property Damage - General Lisbility	Green Card-Graing in front of 35° valve on T-3106 is loose and needs to be enchored to the Fazern.	Green Card~Lcose	Near	11/22/2011 6:00:00 AM Closed	Richmond, 11/2 CA - 6:00 Refinery AM	28439 F	T
(1) Pump cavitaion	Operational Process/Procedures	In an attempt to warm up and switch to P-1635A in order to pull suction screen on P-1635 pump standed to cavitate coursing a process upset. HNF had to be realled of test for 4 hours. F-1650 went to min fres.	Cavitation of P-1635 ceused process upset in HNF casing product to be routed off test for 4 hrs.	d	11/21/2011 8:45:00 PM Closed	Richmand, 11, CA - 8:4 Refinery PM	26415	1
(†) Process Data Mainteiners did not follow all required steps	Susmess Process		Process Improvement for BR manpower transactions	Loss	2/15/2011 12:00:00 AM Closed	Richmond, 2/10 CA - 12:0 Refinery AM	26378	T
	NL-Fire/Explosion	-	Green Card-Bolle Not Secured	d Near	11/15/2011 10:30:00 Closed	Richmond, 11/ CA - 10: Refinery AM	26369	1
(t) 5 WHY INVESTIGATION 1. Why did the problem occur? The off-gas from V-1420 was routed to reite! 2. Why? The pressure differential between V-1410 and V-1420 was increased to drop the level in V-1410 and avoid shutting down the recycle compressor. 3. Why? The fordown valve between V-1410 and V-1420 was fully closed when the ded was pulled. This did not provide autificient time to calch and control the lavel increase in V-1410.	NL-Environmental . Refease	All approx 6:45am a leak was delected on an Edwards yalve on 14 Pit feed system and the disset sulfiding was stopped and FAC feed pump was shundown. At this firms H2 M/U was infocuted to sweep ell off the Calelyst in R-1410 and R-1411 to the high pressure Y-1410, V-1410 havel came by sharply. At aprox 6:50em OPS vented the Low Pressure separator V-1420 to retilet to noneasse the pressure affirence between the high pressure system and the low pressure systems to help sweacate Y-14(0's high high level.	Tripped RLOP fare lotalizer after shulting down faed pump due to valve leak.	d Loss	11/20/2011 6/45/00 Closed	Richmend, 117 CA - 6:40	26249	T
(1) This was a unique situation and requirad a non-routine process to get this sample for startup LPSA discussion did not consider residual half would cause overpressure when circulation schaleriaed	NL-Environmental - Release	SISO was requested pull earriptes of C-130,C-140 and Tex shipper. In order to get at legitest elegited the ENO startup body was circulated VIA P-140 and P-130 (P-140) that LC-140 to C-130 to and bottom pens back (b C-140). There was wrough residual heal in C-130 that when the process (LCC) and unwanted eakwait) ordered bed him C-140 it fleshed overhead into V141 (low pressure solvent accumulation and over pressured it sending solvent to V-150 ratil of drum. This hipped the FCC and Alky (ctalizer but no visible fiame that we could see.)	FCC and Alky flare	Ven Loss	11/20/2011 9:15:00 AM Closed	ے ا	Richmon CA - 25244 Refinery	T
M O O O	NL-Regulatory Compliance - Non Compliance - Air	The kissispel Voyager was discharging water and recovered oil riols T.: 504. This is not a typical process and all motived were ware of a potential HZS issue with the material being moved. All involved were aware that the financier terquired tension all reads considerably slower than normal for the ship, approximately 2MBFr. All 4:30 on 1/1/3, the subp began decharging the promotional by 2MBFr. All 4:30 on 1/1/3, the subp began decharging the material althe slowest rate passible for their pumps, approximately 3MBFr, into T.:504. All 15:00 the STL received a "theast-up" from a company employee that was crossing the fichmonufcian Refers Ellotige that those was an odor OHSD at the lot plaza. Plant Protection was called to verify the odor, and once It was determined the source was T-1504, the transfer was shul down immediately.	T-1504 Odor Issue	No.	11/19/2011 3.02:00 Closed	Richmond, 11 CA - 3.0 Refinery PA	26242	1
(1) Breaker opened unexpectedly	Process/Procedures - Safely Systems	Braskor#254.1 @ TX 254/255 tipped for unknown reasons causing a power outage in the D&R Control House.	power outage in the D&R Conirol House	Near Loss	11:00:00 AM Closed	CA - 11 26222 Refinery AA	26222	T

·	Rich CA.	20784 Refi	Rich CA - 26773 Rofin	Rich CA - 26755 Refin	Rich CA - 26754 Refu	Rich CA - 26677 Refin	Rich CA- 26674 Refi	Richmon CA - 26665 Refinery	26632 R&A	RICA CA 26617 Refi	Rkh 26613 Rkh	Richmon CA - 26473 Refinery	26466 Refu
	Richmond, 11/27/20 CA - 7:50:00 Refinery PM	Richmond, 11/27 CA 12:00 Refinery AM	nond.	mend,	mond,	nond,	Richmond, 11/24/2011 CA - 2:90:00 Refinery PM		Richmond, 11/23 CA - 6:19:3 Refinery PM	Richmond, 11/23 CA - 12:00 Refinery AM	Rehmond, 11/23/2011 CA. 10:25:00 Refnory AM	<u>.a</u>	Refinery PM
	11/27/2011 7:50:00 Closed	11/27/2011 12:00:00 AM Closed	11/27/2011 7:30:00 AM Closed	11/28/2011 12:49:00 Closed AM Closed	11/25/2011 10:13:00 Closed	11/24/2011 12:00:00 AM Closed	00 Closed	11/24/2011 12:00:00 AM Closed	11/23/2011 6:19:00 Closed	11/23/2011 12:00:00 AM Closed	3:00 Closed	11/16/2011 1:00:00 PM Closed	Closed
	Coss F.	Near fa	Near ov	Near F-	Near F	Loss los	Near a	Near mi Loss #2	오랫장각	Less 14	555 14 P.7.	Near Gr Loss Da	Loss Gr
	K-1900 surging until normal feed gas is available.	F-3901 totalizer trip visible flame while circulating H2 at DHT	White starting X-1900, 89PC594 opened to relief overwelming FGR and tripping the FCC totalyzer.	E-3901 totelizer trip, flaring visible flame	F-3901 totalizer trip, no visible flame	lost LOTO key box 2043	a personal H25 monitor went off	misplaced Lolo Box key #2043	Fire reported between the Redwood Peinting traiter & the LSM Contractor traiter off Xylene St.	White installing a blind in a 14" fire water line mechanic gol a partial in the eye.	K-1400 tipped on Hgh Pressure separator(V. 1410) High Hgh Level	Green Card-Equipment Damage	Graling
	RLCP plants are in the process of starting up after a Major turnarcund. Unit more process gases are available for feed, K-1900 is feed other gases as a substitute. Without propar gas rised to K-1900 the compressor will surge a substitute starting as which is feed to K-1900 will not be available. The normal process gas which is feed to K-1900, will not be available that either LKC in HKC produce off east. During this time, PCO is continuing to make saveral moves to optimize K-1900's operation understong adding and removing NZ, V-1920 verk gas, TKC overhead gas and plant lovel gas.	F-3901 totalizer trip visible flame. While circulating H2 at DHT overpressured to relief.	While starting up K-1900, 89PC694 opened to relief, overweining FGR and in tripping FCC totalyzer.	F-3901 Iotalizer tipped and flared with visible flame due to K-242/52 shutdown is on high liquid level at Knockout pot.	F-3501 (delizer inpeed, no visible farms while starting up crude unit. C-1490 pressure controller opened up to control pressure and overwhelmed reiter system. K-3950 unaning at the stree.	LOTO box key lost 2043	Bigge - EE was on the dack at V1177 with 3 other EEs when his H2S mortilot went off. No one elses went off. No one smalled any H2S. When tested his had a reading of 26ppm		TOP INVESTIGATION: INITIAL DESCRIPTION:FOR FULL DESCRIPTION SEE LINK IN INVESTIGATION. A fire was reported at approx. 18:19 hrs. In its area of the Redword Painting compound of Xylene St. (GW content of SOSS) (Dipon arrival, the fire was tocaled between a Radwood Painting traiter and the LSM Centrador traiter, initial inspection of the area is tearing towards a flaz waste bin as the point of ignition. The LSM traiter has sustained significant famings, investigation is orgoing.	Machanics were on a staging 25% in the air removing old bolls to install a 14-th blind when one of this mechanic fall is one-pring in their eye. They flush there are at the job site bot as a procudion they had the cikic verify that the particle was arroved before they left for the weekend. No particle was found in the eye and machanic was released select to work.	During HNC startup activities, at 10,00 am 11/23, Rt.OP ops personnel and SiD maintenance went out to work on 841,V466 to dot a stroke check prid'r to putling it in operation. At the time 441,V460 was in service. These valves control the level on High pressure separator. V.1410,Centrol Air was manually switched at the V.458 to perform a stroke check prior to placing at in service, this took the air off of LV.458 effectively seiting the verte were it was, leaving the CWS-5 with no level cantrol. At approximately 10:10 CWS-5 is genet that the level was empresous. Looking at additional information on the board (V.1420 low pressure separator level Chorphog), it was determined that the level was rest and CWS-5 sciled out on the radio that the level in V-1410 was fishing repidly. Before midjading action could be accomplished, K-1400 by the down on LAHH-TRIS also caused frating. All was switched back to LV-458 and V-1410 Level was breagly under confrol. Subsequently the outside operators took steps to restart K-1400.	Green Card-When I pick up the carry deck and do the check fist and I found a leable clamp was loose. The cover in the back is stuck and I could not open it to it check the water level.	naeds to be clamped down. It is currently unsafe to walk in that area.
	NL-Operational Process/Procedures - Safe Operating Umit (SOL) Exceeded	NEnvironmental - Refeese	NL-Envirormental - Rakassa	NL-Environmental - Rolosso	NL-Environmental - Retease	NL-Operational Process/Procedures - Safety Systems	NtInjury/liness - Contractor Injury	NL-Business Process - Business Interruption	Fire/Explosion	NL-kajury/libess - Employee krjury	Operational Process/Procedures	NL. Equipment/Property Damage - Equipment Damage	Contractor Injury
(1) The C-1500 manway M-3 corrosion damage was reported late because the inspector of direct see it, mark it, report it, or decreased it control to the latest the control of the latest the latest the control of the latest the lat	(1) Our current K-1900 startup procedure (GRU-NP-4501) does not include the use of NZ as supplementary feed gas during start-up.								(1) Waste bin and trailor were in close proximity to each chier, (2) Varied material was piaced in and around the hazardous waste thin, (2) Sidebar: Current Industrial Obstat Hazardous Waste bins in use in the refinery are made of plastic and will catch fire when exposed to high heat from burning materials. (4) Sidebar: No forensic analysis performed by Chevron Fire Department		(1) Miscommunication on control air satup		

27233 Re	27202 Re	Richr CA - 27200 Refin	Richr CA - 27199 Rein	27166 R	27165 Ref	27164 R	27162 R	27161 R	27160 R	27159 R	27157 R	Rich CA - 27156 Refir	27155 R	27153 R	27152 Ru	27151 R	27150 R	27142 R
Richmond, 12/3 CA - 11:3 Refinery AM		nond,	esy norad,	Richmond, 11 CA - 8: Refinery Al				Richmond, 116 CA - 1:16 Refinery PM	Richmond, 117 CA - 2:00 Refinery PM	Richmond, 11 CA - 2: Refinery Pi	Richmond, 1: CA - 2: Refinery P	mond,	Richmond, 112 CA - 123 Refinery PM	Richmond, 1: CA - 3: Refinery Pi	Richmond, 1 CA - 2 Refinery P	Richmond, 11/ CA - 9:00 Refinery AM	Refinery A	
9/2011 90:00	0:00	+	3/2011 3:06	11/23/2011 8:45:00 AM	22/2011	22/2011 1:00		32/2011 3:00	22/2011 0:00		11/22/2011 2:00:00 PM	11/21/2011 2:00:00 PM	90/2011 10:00	11/18/2011 3:00:00 PM	11/17/2011 2:00:00 PM	0/2011	10/31/2011 B:00:00 AM	
Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Ciosad
S50-	Loss	Near	Loss	Near Loss	Coss Near	Loss	Near Loss	Loss	Near	Lass Neer	Near Loss	Near Loss	Near Loss	Near Loss	Loss Near	Near Loss	Near Loss	Coss
4H2S process conditions caused high H@S in the fuel gas system	Operator vehicle struck side plate on T-3129	Vapor from V-1920 cause K-1900 PC 89PC694 open to relief and overwhelm the Hydro relief header to FGR.	Spent NZ cylinder fell on operator's foot when being moved	Green Card, Big pothols, Location; D&R Southside of Cooling Tower	Green Cerd. Welder working without a weld screen, Location; 5 Cet	Green Card, No barricade tepe or legs, Location: 4 Crude parking lot	Green Card, 4" flanch leaking water. Location: FCC unit	Green Card. Steam Leak, Localion: FCC Unit	Green Card, Pipes on pipe rack are wet and slippery. Localion; RLP	Graen Card, Piace of conduit sticking out on walkway, Location: 4 Coude - Corners of F1160 N	Green Card. Piece of pipe in walkway. Location: 4 Crude F-1100	Green Card, Firehose box does not have blue caulion tape, Location: RLO Wold Bay	Green Cerd. Unsere conditions for workers to eat. Location: 4 Crude lunch tent	Green Card. Forkilft driver moving load without securing it. Location: 5 Cat parking lot	Green Card. Contractors walking on top of pallets. Location: 8 Warehouse	Green Card, Blind comer, Location: Quarry Rd, Bridge 173 at Tank 956	Green Card, Possible sink starting. Location: Power Pole 4003/Xylene St	C-took-3
High feed rates to 4H2S caused high process temps in C-1010 overhead carrying high H2S into fuel gas system.	While doling rounds operator parked vahide near T-3129. As they were leaving the area the operator struck the side plate on T-3129 with their vehicle causing moderate damage to the right side of the vehicle.		Operator was changing out a spent N2 cylinder. While "rolling" the empty cylinder (outside of the B&S lab) over to the cylinder storage erea to exchange if for a full one, the operator tost control of the empty cylinder and it fell lending on the operators left foot.		Green Card .JV. weder working inside weddbay witkoul a weld screen, Saveral people complained of flash sperks hurling their eyes while sitting at the smoking post next to the lunch tent.	Green Card. Heavy traffic in 4 Chude parking lot. Biggie worker cioling a pick with the drop. No benirated stepa or tegs. Although the lift was quick, someone could have walked under the load.	Green Card. 4" flanch leaking water in FCC unit next to Tank EC5205A/T252.	ange and valve. In front of	Green Card. Pipes on pipe rack are wet and slippery.	a piece of	Green Card. Place of pips in walkway. Ready for a head knocker.	Green Card. 2" pipe going to the firehose box is broken at the union and the firehose box does not have blue caution leape on it. Showing it does not work.	Green Card. Several pigeons sitting on lunch table. Footprints all over funch tables. Two cats running over and across worker funchbox. Unsafe conditions for workers to eat.	Green Card. Forklit driver moving load without securing it. Dropping small pieces of piping, boils and gaskels while traveling on uneven surface.	Green Card. Several contractors walking on top of pallats of blinds, located at 8 Wareshouse. Blinds have dow siting on top. Stop and talk with worker, walk around or have pallats moved.	Green Carl Blind comer at Ouarry Road, Bridge 173, at Tank 956, Tree should be cut beful norder to see traffic on blind comer. A lot of ruck traffic going on right now.	Green Card, Looks to be a possible sink starting Power Pole 4003 on Xylane Street, Voids around pole.	manually blocked in, allowin the coolers to plug. Process/Pro
Regulatory	Transportation	NL-Operational Process/Procedures - Safety Systems	injury/iiiness	Nt-tnjury/litness - Employee injury	NL-injury/iliness - Contractor injury	NL-injury/iliness - Contractor injury	NL-Lessons Learned	NL-Lessons Learned	NL-injury/liness - Contractor injury	NL-injury/iliness - Employee injury	Nt-injury/iliness - Employee injury	NL-Lessons Learned	Nt-Lessons Learned	NL-injuryfilness - Contractor injury	NL-Injury/Iliness - Contractor Injury	NL-Lessons Learned	NL-Lessons Learned	Process/Procedures
(1) Operator did not increase DEA circulation sufficiently for the situation. (2) Operator did not send enough process gas in process.	(1) Drivers have been allowed to drive close to the tanks with no consequences, (2) Drivers have been allowed to drive close to the tanks with no consequences	(1) PC Bypass not identified when lining plant for start up. (2) - Venting of none condensable is not included in startup procedures.	(1) Risks recognition is less than adequate, (2) No training safety awareness on moving compressed gas cylinder., (3) Audit is less than adequate, (4) Side bar recommendations, (5) Tools or equipment safety is loss than adequate										-					SDAN2010 and not a signoff step.

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27510 R	27471 R	27442 R	27435 R C R	27418 R	27418 R	27361 R	27345 R	27336 R C R	RICI CA Ref Ref	27205 R	27247 R	27246 R
Richmond, CA - Refnery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmord, CA Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmord, CA - Refinary	CA - Refinery
11/20/2011 12:00:00 AM	12,6/2011 11:00:00 PM	12/6/2011 9:00:00 AM	12,6,2011 11,50,00 AM	12.6/2011 12:00:00 AM	12/6/2011 12:00:00 AM	12/5/2011 9:30:00 PM	8/10/2011 11:00:00 AM	11/30/2011 9:00:00 AM	12/4/2011 1:15:00	12,4/2011 4:50:00 AM	12/2/2011 8:10:00 PM	4:50:00 PM
Descio	Closec	Closed	Cloude	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
Coss Naer	LOSS LOSS LOSS LOSS LOSS LOSS LOSS LOSS	Loss	Negr	Coss	Negr Loss	Neer Loas	Loss Loss	Logs Negr	Loss	Loss	Loss	Loss
Memary Error on CCC card for wet gas compressor	Air Products Nilrogen Delivery truck jack knifed on Chernel St.	T-634 tank shell weeping hydrocerbon product.	During 23 Plant PSA start up, one of the valves falled to operate and tripped the FCC/Alky/RLOP and SISO flare totalizers	localed a PRD that was listed as inactive but is actually in service	located a PRD that was keled as inactive but is actually in service	P-1601 tripped on low lube oil flow	IsoDMC Cut IsoCATs when being Tumed ON after Furnace Testing	Admin. Emergency Generator was found to not be on a PM Maint. schadule	Lass of ABCR	C-1920 overpressure Iripped flare totalizers	RLOP S/U flare Totalizer trip	Tripped Riop Flare totalizer
On Sunday Evening operators received and elerm on CCC control page and believed they had a card failure in the CCC system for the Wol Gas Compressor, Control Systems group investigated and determined the alarm to be a memory error (MVR Check Faul). As this is a system with high redundancy, there was no immodelate danger, that so plant persultans.	Air Products Truck with ful load of nitrogen jack knifed while attempting a U- turn on Channel St. In front of Hydroprocessing.	Weep observed on the shell of T- 634 that constrained working capacity.	During the PSA, start up on 1206/11 at 11.45, valve 5058 feated, causing overpressing of PGR, Excess flow was sent to FCCARAYRLOP and SISO flares. Those 4 totatizon tripped and a wirble flame was observed at the FCC flare. All valves on the PSA kild write previously stoked at number of times to early their proper operations a prior to attending up the plant.	Located PRD PC-280 that was identified as inective. But the 10 tail line is sculally available for service if needed and the PRD should be readingled.	Locabed PRD PC-280 that was Identified as inactive. But the 10 tail line is school by a value to control of the PRD altoud be readivated	At approximately 21:30 125. P-1601(PNF Feedpump) Developed a high sufficient bearing temperature atem temp that reached 341 degrees. Whills ops were prepaire P-1601 At or sortice, her wars still revolushationing P-1601. In the process of troubleshooting, Both P-1601 Libb oil pumps were started. The labe oil system high pressure starm bitlands an operations shut down one of the labe oil system high pressure starm bitlands an operations shut down one of the labe oil pumps. At this point. The labe of PC went wide open so when often sub- oil pumps an indown we shipped the fed pump on low labe oil pumps and the labe of processure. P-1601A was started and food was felinteduced into HNF. Plant is normal PED support has no issues with Reactors.	Idonax JNG was controlling C730 Birns level with IsoRX. The DAICISO controller was lumed off to do furnace testing on one of the R500 Iso Rx Furnaces. When Operations turned DMCISO back on only the reactor sub-controllers were put back on and no edusationally was made to the 750ATAVG lithits on DMC sat drove to the Investigational I was no longer controlling C730 Birns level. This is a training issue opportunity.	It was discovered that the Admin, Bidg emergency generator was never put on a PM Maint schedule.	The four coude operator had a high tervel on 5 S/C and D/P on 4 S/C. DMC was on the Afmaphine's column at shift accept the 4 S/C draw. It had issues and was eating erraiteaby during the dayshift and at titum over the orders were given to feave in Auto control and to have it dissubted from DMC. During the evening the proc had been drawing more on 4 S/C other DMC. During the evening the proc DMC at alleviate as high two in 5 S/C draw and a high DP on PDDQA. At 1:06 the 4 S/C draw tray was drawn drown and succious passure was minimal. At this time we lost the ABCR and the scotling for C-100. The result was an upset of the Column and product streams. This Temperature profile swing tested hour.	At 0.450 C-1920 overneat popped to reliat due to a loss of reflux and increased light ends from C-1910. 1. As Creckers alarl making light ends in the overhead going to GRU, C-1910 its too cold. This light ends hydrogen, rephane and ethane, carry cut the bettom to C-1920 instead of going overhead to 415.2. As a these hight ends come to C-1920, they ended up filling Operational by V-1920 and overwhelming FGR.		t of
NL-Operational Proceos/Procedures Plant Run Out/Slow Down	Mr-ressens rearned	Equipment/Property Damago	NL-Environmental - Refeasa	NL-Operational Process/Procedures - Safety Systems	NL-Regulatory Compliance - Non Compliance	NL-Lessons Lagrand	NL-Operational Process/Procedures - Plant Run Out/Slow Down	NL-Lessons Learned	Operational Process/Procedures	Operational Process/Procedures	Operational Process/Procedures	Operational Process/Procedures
(1) Why is K130 generating non-volatile RAM (NVR) check fault atoms? The fault is caused by a check sum discrepancy. The possible cause is: The faultility of the cruther to correctly calculate the checksum due to insufficient processing time. (2) Why is K130 generating non-volatile RAM (NVR) check fault alome? The fault is caused by a check sum discrepancy. The possible cause is. A possible menory error in once or macro et the CAM card group memory error in once or macro et the CAM card group.		(1) A deficiency in the quality checklinspection of work process Caused a problem to be missed.	(1) Why did we trip the 4 flare totalizers We tilpned the totalizer the sease the valve 5058 stuck closed during start up. Why di 5958 stick during start up. 5658 stuck due 20 plant being down for 7 weeks and the valves have a fondency to stick if they are not of cysied on a continual bases.	•		(1) Operaliens Shuldow a lube cil pump with PC wide open	(1) Project learn considered taking automatic action in this particular accessing, but decided against automatic action to minimize the amount of caustern programming required to do riths. (2) Why did the operator not know what would happen? Although the operator had received training, this event occurred early in the commissioning of the controller.		(1) Training and experience	(1) CO5 did not understand the importance of heat in C- 1920 bacause of lack of experience	(1) C-1920 column instability due to low feed Rate	(1) Unit start-up, K-1900

		<u> </u>				 				
	27816	27793	27793	27734	27689	27683	27660	27644	27607	27607
Richmond, CA	Richmond, CA - Rennery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Rafinery	Richmand, CA - Refinery	Rehmend. CA Refinary	Richmond. CA - 27607 Refinery	Richmond, CA - Refinery
11/9/2011 6:30:00	12/6/2011 12:00:00 AM	12/12/2011 8:00:00 AM	12/12/2011 8:00:00 AM	12/12/2011 8:30:00 AM	12/11/2011 10:39:00 AM	12/10/2011 12:00:00 AM	12/9/2011 9:30:00 PM	2///2011 12///2011 AM	12/8/2011 11:00:00 AM	12/8/2011 11:00:00 AM
2	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
N N	Near	Near Logg	Near Loss	Loss	Neer Lond	Neer Loss	Near Loss	Loss	Loss	Loss
Green Card, A lot of mosquitoes. Location; dirt lot by Timec Tool Trailer	Short-term loss of ABB RVP analyzer signal from Mogas blend header	5 Cat fed off test material from T-1459	5 Cal fed off test material from T-1459	Gate 12t shut on RTD bobtall muck when entering Whan	LPG truck jock knifed while attempting to do a u-turn.	toaded approximately 30 MB of off spec diesel to lihe Stens Concert	At approximately 21:30 hrs. K-242/252 hipped off this due high levels on V-242/243	HNF 600R tark T-3167 finaled of√lest for viscosity at 40C	Edibles Catering Van mikhap on read te Rod&Gun dubhouse	Edibles Calering Van mishap on road to Rod&Gun clubhouse
Graen Card. A fot of mosquides in work area	RVP measurement from ABB analyzer was not updating on the Honeywelk displays when the Mogas bland stafed on 128/11 at 1:30pm, as indicated by a Baq PY saxus on the BPC Property graphic.	12/12 dayshift switched 274 Line at 06:00 from T-634 to T-1459. Nighshift arrived end file RSL noticed rates not right in T-1459. Suspected that T-1459 was going backwards to 5 Cat at D&R, T&B and D&R began a search to find out why.	12/12 dayahit switched 274 Line at 08:00 from T-634 to T-1459. Nighshift arrived end the RSL noticed rates not right in T-1459. Suspected that T-1459 was going backwards to 5 Cest at D&R, T&B and D&R began a search to find out why.	Bigge Diffuer bedged that gate 121, the test gate before going onto the Wharf, Truck was started into the opening when the gate shut on the RTD bedtail fruck. Driver did not notice rolling gate shutking until he heard the gate contacting the fruck, Gate only needed to shut les than a fool before contacting the mirrorDamage occurred to passenger side mirror and body of the RTO Bobiali fruck.	An LPG pusk tried to gain entry to the Refinery using the wrong gate (91Gate) Security asked the other to bast up but diver salied that he could not Driver instead field to complete a usum in the small space before the guard post and jack knifed the pear tradier. Trailers had restitual LPG from a previous load other lean that It was mostly empty.	24	At approximately 21,30 frs, K.242/252 trippad off line due high lavels on V- 242/243 coming from V-1680 (DHT) V-1680 has a bad lavel kensmitter awaiting repair (16LC063).	The RLÖP Heavy Naubal Firishor (HNIP) went or a 600R production run between 1222-1250. The lank finaled on 125 night-shift. The lank was sempled for Natocostly et 4000 with a result of 90 3 cSt. The species 100 cSt minimum. The sample was tested edgein with a result of 90 3 cSt. The species 100 cSt minimum. The sample was tested edgein with a result of 92 2 cSt. A fresh sample was then pulled from 1-3(67, The result was 92 cSt.). At 141 spintl, the lank was determined to be critical and unsatisate for sales. During the 600R run, approximately 15% of the samples were below 100 cSt. Moves were made to increase viscosity froster vacuum stripper C-1650 overhead temperature and botter vacuum fumace F-1650 ovidn temperature) but were unstrocastitul in thoreasting the viscosity to on-lest conditions. Compounding the problem, HNC feed (8 sidecul) and the way 600R produces at the HNC vera lighter than normed due to stering echklies at both plants. During the 900R run into T-3167, feed was Introduced finic the Light Neutral Finisher and the 60s at 1215 or increase the viscosity in T-3167. The run successituly rashored on-lest conditions at T-3167. No orf-tast material was released from T-3167. Viscosity at 400 till a mew specification (100 cSt minimum) on 600R that was introduced introduced in the conditions at T-3167. No orf-tast mixed in turner on 600R that was introduced introduced was completed solve to the Turneround for this change. Communication and Training was completed prior to the Turneround. However, no follow-up training was completed prior to the Turneround. However, no follow-up training was completed prior to the Turneround. However, no follow-up training was completed prior to the Turneround. For this change. Communication and Training was completed prior to the Turneround. However, no follow-up training was completed prior to the Turneround. For this change. Communication and Training the subscience of the change. Communication and Training the subscience of the change of the complete of the change.	Since it is a difficult load for caleriers to get up to unload at the Rod & Gun Club House, I had a shed Ray Aguilleu. EQUIPHAENT OPERATIOR, AND TRAINER, to come guide the Edibles van driver, Mark, up whand signals, as Ray has generously volunteered as a bystender in the peat, due to his focus on motor various sately. Unbrunnariety, Mark, his eEbbes driver, stepped on the order of motor various sately. Unbrunnariety, Mark, his eEbbes driver, stepped on the very ong per inclosed of the brake, and cracked in fide his force. (Said his a used to driving as a ducth). Wohlich was succeed on the corrected embeddement.	Ray has generously volunteered as a bystander in the past, due to his focus on molor vehicle safety. Unfortunately, Marx, the Ectipes driver, stepped on the vari gas inflested of the brake, and creathed into the ience. Staid hat is used to driving a cluich), Vehicle was such on the operated embeddment.
NI-leasons Learned	NL-Quality - Product Quality (Int)	NL-Operational Process/Procedures - Plant Run Out/Stow Down	NL-Qualily • Product Quality (Int)	Equipment/Property Darmage	NL-Transportation - Contractor	NL-Quality - Incorrect Product	NL-Environmental - Release	Aleno	Equipment/Property Demage	Transportation
	(1) End-of-life RVP analyzer, (2) End-of-life RVP analyzer	(1) 274 Line was set to a tenk that could back flow into 6 Cat. The potential for back flowing T-1459 to 5 Cat was not recognized when the routing was set up.	(1) 274 Line was set to a tank that could back flow Inio 5 Cel. The potential for back flowing T-1459 to 5 Cel was not recognized when the routing was set up.	(1) Galo maliunction		(1) Operator did not involve subject metter export(s) before deviating from orders.		(1) T-3187 finaled off-test for viscosity. Why? Production from the HKF-was less than the 100 cSt @ 400 minimum for approximately 75% of the run. Why? T finalitiess of plant in moves and stort-up conditions and entire from the test for viscosity. On the lank., (2) T-3167 finaled off-test for viscosity why? Production from the HKF was less that the 100 cSt @ 400 minimum for approximately 75% of the nun. Why? T-3167 finaled off-test for viscosity. Why? Production from the HKF was less that the 100 cSt @ 400 minimum for approximately 75% of the nun. Why? T-400 minimum for approximately 75% of the nun. Why? T-400 minimum for approximately 75% of the nun. Why? T-400 minimum for approximately 75% of the nun. Why? Finisher Tools of not in the NCP with the nun. Why? Finisher Tools of not have conditional formation for class and near off-test conditions.	(1) Divor of the catering van west backing up steep driveway to deliver kunch. A spotter was used to direct him up the driveway Driver was able to back the velvides up the driveway and at the top of the driveway, strived or applying the braiks, driver pressed the gas pedal instead which caused van to go over curb.	driveway, Driver was able to back the velide up the driveway and at the top of the driveway, instead of applying the brake, driver pressed the gas pedel instead which caused van to go over curb.

27881	27674	27873	27871	27870	27869	27867	27866	27863	27860	27857	27864	27852	27847	27846	27845	27842
Richmand, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond CA - Refinery	Richmond, CA - Retinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond CA - Refinary	Richmond, CA - Refinery	CA - Refinery
12/12/2011 5:00:00	12/13/2011 12:00:00 AM	12/13/2011 10:07:00 AM	12/8/2011 9:00:00 AM	12/8/2011 12:00:00 AM	12/8/2011 6:40:00 ANI	12/7/2011 8:30:00 AM	12/7/2011 8:00:00 AM	12/6/2011 11:45:00 AN	12/6/2011 10:30:00 AM	12/5/2011 10:00:00 ANI	12/5/2011 2:10:00 PM	12/5/2011 10:30:00 AM	12/4/2011 7:00:00 AM	12/2/2011 9:00:00 ANJ	12/1/2011 8:45:00 AM	7:00:00 AM
Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closted	Closed	Closed	Closed	Closed	Clased
Near	Near Loss	Loss	Near	Near	Noar	Near Loss	Coss Coss	Loss Name	Near	Nanr	Loss at	Near Loss	Near Loss	Loss Nosr	Near Loss	Near
IX-3615 PRD pop date	HNF feed pump P-1501A tripped off line twice, P- 1501 was placed in service	Lass of B S/C to RLOP	Green Card, Electric cord plugged into generator with no GFIG, Location: Lubricants Pit	Green Card, Wind sock needs replacing, Location: TK-3197 Pole Yard	Green Card, Walkway needs rails, Location: Northaids of B&S Control Rm	Green Card, Water line with hole in it. Location: S, Isomax	Green Card, An 8" steam pipe to leaking. Location :B&S T-3106		Green Card, Permit blowing in the wind. Location: Dirt fot by Tool	Green Card. No street sign off Channel St Location S. Isomax H2A Plant	Green Card, Valve stem with no cap. Location: RLOP - Pump 1911A	Green Card. The wind blows the stop sign down. Location: Zerolene and Mill St	Green Card, Wind sock needs to be replaced. Location: Sour Water Mariff	Green Card. Wind sock needs to be replaced. Location: Manifold Rd.	Green Card, Faded peint on stop sign, Location: Xyfene St	H2A plent on Chennel St
Yesterday while field-walking some equipment, the FER Inspector discovered a discrepancy in the pop date for the SISO PRD IX-38 is on the H2B Train fuel gas filler coalescer K-355 (shown on the inted PAID as FSV-355). The histories show this PRD was lest popped in 0/1/2008 (hence why it doesn't show in OERI), but the stamped field tag on the PRD shows it was lest popped in 2002 (when the coalescer was installed).	P-1601A inpped off line, Pump was restarted with life-multi on. Once pump was up tife-multi was taken to normal and P-1601A tripped off line again.	On 12/13 at 10 07 AM board operator received low pressure airm and actioed VBCR and 8 SC to HWC/tankage drop off. Shortly before board operator received low pressure same has find operator hand a food knock and VBCR into share, After checking P-1188/A and P-1188/A white operating properly operator checked 115/V20A and found the valve open 15% compared to normally operating 100% open, instrumentation technician found FV020A positivator conduct was from 64 due to easing on a hot finance. This caused a partial short sending a signal to partially close valve.	Green Card. Electrical card plugged into portable generator with no GFIG, if electrical lool gets dropped in water without protection, workers can be shocked or electrocated.	Green Card. Wind sock needs replacing at TK-3197 Pole Yard.	Green Card, Nerthelde of Central Room welkway needs rails by drainvelich. You have a good drop off.	Green Card. Water the with hole in it spraying all over road. Located et S. somax Pipe Southwest of 20 Plant.	Green Card. An 8" steem pips is leaking out steem end it looks like a welding job because it leaks out from the pipe rol a filling.	Green Card. Transfer & Blending control room alongside of building there is a pipe rack blow grade that does not have a guardral or handrall. Someone walking can fall into the hole especially at right.	Green Card Up to dote permit blowing in the wind.	Green Caxd. No street sign off Chennal Street driving thoough H2B plant. Shourd an emergency occur in the plant new employee's would not know where to direct energypricy drews.	Green Cord. At Pump 1911A there is a valve stem with no cap at eye level.	Green Card. The wind blows the stop sign down at corner of Zerolene and Mill Street.	Green Card. Wind sock needs to be replaced.	Green Card. Wind sock needs to be replaced. Lacation: TK-9074 on Manifold Road.	Green Card. Across Standard Oil switching slatton and Xylane St. a stop sign's red pairs is raded away.	Green Card. Steam plume, While driving north on Channel St. near the new HZA plant, thord's a steam look that blows directly into criving lanes.
NL-Environmentel • Release	NL- Equipment/Properly Damage - General Dability	Quality	NL-Injury/IIInass - Contractor injury	NL-Lessons Learned	NL-injury/linoss - Contractor injury	NL-Lessons Learned	N1-Lessons Learned	NL-injuy/iliness - €mployae injury	NL-Lessons Learned	NL-Lessons Learned	NL-Lassons Learned	N1-Lessons Learned	NL-Lessons Learned	NL-Lessons Learned	NL-Lessons Learned	NL-Lessons Leamed
(1) The 705a Data Sheet for PRD# IX-3616 was incorrectly flabeled as IX-3615. (2) There was less quality control in the PRD process after to 2008.	(1) Inadequate procedure for Operator Interface with the vibration monitor and trip multiply/ danger defeat buttons	(1) inproperly secured conduit was exposed to high heat which caused the wire to short and partially closs FV020A.														

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	28099	28099	28095	28064	28054	28046	28026	28026	28017	27974	27941
Richmond,	Richmond, CA - Refinery		Richmond, CA Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA • Referen	Richmond, CA - Refinery	Richmond. CA - Refinery	Richmond CA - Refinery	Richmond CA - Refinery	Richmond, CA - Refinery
Richmond, 11/27/2011	11/27/2011 12:00:00 AM	11/27/2011 12:00:00 AM	11/27/2011 12:00:00 AM	12/15/2011 11:00:00 PM	12/16/2011 1:30:00 PM	12/15/2011 12:00:00 AM	12/15/2011 7:30:00 AM	12/15/2011 7:30:00 AM	11/27/2011 12:00:00 AM	12 <i>H \$12</i> 011 1.10:00 AM	11/22/2011 7:00:00 AM
	Ctosed	Closed	Closed	Closed	Clased	Closed	Closed	Closed	Closed	Closed	Closed
	Loss Near	Loss Loss	Coss	Loss Loss	Loss	Lass	logs.	Loss	Loss Nes	Near	Coss
	V-1198 had high levels during start up of the plant on multiple occasions	Y-1198 had high levels during start up of the plant on multiple occasions	during the start up of the #4 Crude Unit the Nh3 line was operad to 1 side cut stipper this caused the stipped to have trouble maintaining a level	Last LOTO lack key	mechanic pinch his finger white moving an air operated hacksaw	Flare totalizer trp while responding to the sid of K-1400	Walked Into scatoid tube that was sticking out from rack in scattoid yard	Welked into scaffold tube that was sticking out from rack in scaffold yard	V-1103 blocked in to C- 1100 on start up of Crude Unit	Gas suige from V-1420 to saider overwhelm the milet system and FCC toletizer tripped.	Ergonomic sit to stand desk was domaged by ond repair during abusing
	On both startup of 4 Crude unit we experienced High levels in our railef drum V-1198	On both startup of 4 Crudo unit we experienced high levels in our relief drum V-1198	Since starting up, operation of 1 SIC has been sporedic and we've had no satisfy or maintain level in the shipper. An RH3 injection line that is supposed to be dut of senter was identified as being open into C-110 overhead. Once identified and closed, the column returned to normal operation.	Unable to focalls key for a LOTO fock on R1410K. Lock must be raveed inorder to commiss on plant equipment.	A Contract mechanic pinch his finger while repositioning an air operated hacks aw on the 280 line replacement work at B&S. The injury caused a minor secretion on his left index finger near the pein.	Flara totalizer tip when responding to loss of K-1400. When operators responded to the loss of K-1400 they operad the compressor tow point to remove and faquid, this flow to refer wear more than FGR mechans could handle that tipping the face totalizer, No visible stems was soan. Operators quickly closed the valve to relief and the FGR system returned back to mormal.	EE turned to walk through racks of tubes in scaffod yard and Immediately came in contract with tube at eye level. EE was wearing his safety glasses end nard hat. The EE cerns in contact with his right eye and tube. The impact caused small cut below his right eyebrow. EE was teken to the chevron clinic and then to off site provider. EE received stirrs stips and its capable of returning to work full stuly.	EE turned to walk through racks of tubes in scaffoid yard and Immediately came in contact with tube at eye level. EE was wearing his safely gasses and hard hat The EE cerne in contact with his right eye and tube. The impact caused small cut below his right eyebrow. EE was taken to the chevron clinic and then to of site provider. EE received sitn- strips and is capsable of feturning to work full duty.		2011-12-15 tipping of FCC (talitizer Time 01:00 OWS-5 and AO-2 were in the process of heating up P-1 401;14NC lead jump) in preparation for maintenance to perform a hot alignment Thursday moming, in order to heat up P-1401; 8 side cut its bached via prossure from HIVE flowd aurge dum V-1400 was et 40 just yet and the prossure was lowered to 320 psig to 20 plant. AO-2 blocked in V-1420 pressure was lowered to 320 psig to 20 plant. AO-2 blocked in V-1420 print to 20 plant AO-2 blocked of Control of the 10 plant AO-2 blocked AO-2 bloc	During the recent turnacund, the Eigo RSIP group was requested by Operations to supply a selection of doxes, chairs and elonge to DER. These letters were placed in Blast Proof Mini mobiles at Ergo RSIP expanse for the use of those processing TA work permite. Along with several liams, a 72x72x30 st to stand desk, valued at \$2000, was requested and steppled. When the furneround was complete, all them were refunded to Ergo with the period or the st to stand desk. It was found by our installers on the gravel in periong lot, damaged beyond repair.
	NL-Operational Process/Procedures - Safe Operating Limit (SOL) Exceeded	NL-Lessons Learned	Operationst Process/Procedures	NL-Operational Process/Procedures - Sefely Systems	Injury/Iliness	Regulatory Compliance	กลุ่นๆ เสียง	NL-Injury/Illiness - Contractor Injury	Nt-Operational Process/Procedures - Sefety Systems	NI-Opprational ProcessarProcestures - Safely Systems	Equipment/Property Damage
(1) Field turnover process for start up and shuldown needs to be clearly defined and built into the Operations work process, (2) procedure needs improvement. Next of procedure OVHD temps control, (3) V-118e avitar enior pump was not space to easist with start up, (4) procedures need improvement F-	•		(1) inadequate procedures	•	(1) Employee became complacent and placed his hands in the most comfortable, easiest position in order to lift the saw to reposition it.	(1) HP seperator level was not lowred to dear elarms due to the down stream low pressure separation was at to low of pressure, to high of CP. This was due to warming up the feed purings required operations to lower the low pressure separator pressure. This is done per normal unit start up procedures. This precedure does not cover the scenario of having half the unit up and needing the low pressure separator to be set up with the high pressure separator.	(1) walking through yard not aware of suroundings	(1) walking through yard not aware of surpundings		(1) OWS too eggressive when depressing system through	(1) RSIP ERGO sit to stand desk was broken during removal from the S/S traiter. No one informed the ergo department that the equipment needed to be removed, lark of communication between shut down coordinator and ergo rsip

	NL-Leasona Learned	Green Card. Three 2" pipe need to be supported. Pipeway is located NW of Dressor-Rand office.	Green Card. Three 2" pipe need to be supported. Location: Pipeway NW of Dresser-Rand office	Nam	Closed	12/13/2011 2:15:00 PM	Richmond, CA - Refinery	28205
	NL-Lessons Learned	Green Cald. Clossweik on Xylone St. going across to Newton fence area needs to be repolitied.	Green Card. Crosswalk needs to be repainted. Location: Xylene St	Loss Loss	Closed	12/12/2011 6:30:00 AM	Richmond CA - Rafinery	28204
	NL-Injury/IIIness - Contractor kıjury	Green Card. Walkway form road (o walkway his handrail loose and line walkway is loose and whogy, Handrail with ille salety device is learning out praify good. Location: Long 'Ahari Caussway #5 Marker	Green Card. Handrail and walkway is loose, Location; Long Wharf	Loss Near	Closed	12/12/2011 2:35:00 PM	Richmond CA Refinery	28203
	NL-Lessons Learned	Green Card. Possible silp, titp, fait hazard. Broken 12 diameter cover, is observation will cover. Appears to have been run over by thesity equipment. Near pole marked SS 25 in black, paint background with SS 25 white letters and rumbers. Location: Rear of #2 and #4 substation, 15 (set from base of Standard Oil No. 4 is p. 158 v. v. 12 pole.	Green Card, Broken 12' diameter cover, Location: Rear of #2 & #4 substation	Ne ar	Clased	12/19/2011 9:00:00 AM	Richmond, CA - Rathary	28199
(1) Only 1 of the 3 gaskets were measured for install (if this had happened, would have used the incorrect size one for pump cover), (2) Dustide Machine Strop did not have specific decrence dimension needed. Outside a hop belanced the imposer improperly. (3) Tight cleatances around equipment create more than usual phich points)	Business Frocess	NITIAL DESCRIPTION: SEE LINK ATTACHED IN INVESTIGATION FOR COMPLETE TOP REPORT. Mechanics spent ell day bying to insulel P-1155 Bening brackel with a thot! According to one of the mechanics "Yve always use stegling with a mona-reli to remove and install this pump." The bening brackel gaskel was the wrong 25 see. The Direll had to be positioned in a bight orea and door had to be removed with the boom at fully extended to reach the pump, with the boom at life words.	Mechanics spent all day trying to instell P-1165 Bearing bracket with a Drott	Eg .	Closed	12/17/2011 4:00:00 PM	Richmond, CA - Refinery	28188
(1) Operator did not use existing safety equipment to secure lid.	Injury/Maess	QCD QCC) suffered cut on ferehead white QCO was performing a low temperature Brookheld Viscosily measurement. Lid of lab freezer did not lock in open position and fell on QCO.	QCO suffered a cut to head when lid of lab instrument fell on him.	Loss	Closed	12/18/2011 10:30:00 AM	Richmond, CA - Refinery	28178
	NL-injuryiliness - Employee injury	Green Card. Suffur smoll extremely bed in Hydro weld bay causing nausea and upset stomach.	Green Card. Sulfur small extremely bad. Location: Hydro Weld Bay/SRU Loading Racks	Near Loss	Closed	12/19/2011 6:30:00 AM	Richmond, CA - Refinery	28171
	Employee injury	Green Card. Al approx. 10:15am, a fellow traines reported to the rest of us in clears that he had thippod and almost fell own a creacked and raised part of the pavenment careally outside of the front entence to the clearacom. At approx. 11:20am oxing lunch, I personally witnessed one of our instructors tip and amost fell own a raised metal fulling (something that had been aswed on teden to and flush with the pavenment) that was sticking out of the pavenment and was part of the scatterer raised and cracked pavenment that was previously reported by my follow fereines.	Green Card. A fellow traince tripped and simost fell. Location: Hensiey St, Blog 317	L N	Clossed	12/16/2011 11:20:00 AM	Richmond, CA - Refinery	28170
	NL-injug/iliness - Employee injury	Green Card. During suffur loading, wind is blowing suffur furnes into the Weld bay area. Mechanics are being exposed to levels of SO2 at or above the odor threshold.	Green Card. Suifur furnes blowing into weld bay area. Location: Hydro Weld Day	Near Loss	Closed	12/16/2013 1:35:00 PM	Richmond, CA - Refinery	28168
	NIBushass Process - Abnormal Supply Occurrence	At approx 40:55 hts. on Set. 129/7, Cogen received an alarm that the beckup cooling water pump for TG-600 had stafted. At the same time, Cogen received a cast from the north yard about the fresh water pressure being low. Utilities operations immediately stafted (routleshooling in the fresh water pressure being low. Utilities of operations immediately stafted (routleshooling in that field. A call was made to the EBAULD energency number. The dispatcher for EBAULD and that they were fitting a reserve tank and pulling to hard on the #1 Castro line. They immediately decreased the amount they were pulling of the line which in turn caused our pressure to come back into the normal stance. Total elabated time - 14 minutes. No abnormal effects occurred inside the refinery except for the startup of this backup pump for TG-800.	Drop in pressure on the #1 & #2 Casto Lines (Fresh H20 / EBMUD)	Noar	Closad	12/17/2011 10:55:00 AM	Richmond CA - Refinery	28137
(1) High level in V-1410	NL-Operational Process/Procedures - Safety Systems	V-1410 experienced a high level due to erralic Ll's and K-1400 shufdown	K-1400 Shuldown on V- 1410 high level	Loss Near	Closed	12/17/2011 8:05:00 PM	Richmond, CA - Refinery	28123
(1) 12/17/11 at 09:30 R1410 #2 bed quench valve stopped operating by auto control. Why — Valve would not respond to input MMy — Positioner was not working Why — mechanical failure Why - 7??	Operational Process/Procedures	Al approx 09:30 R1410 #2 bad quench valve stopped operating by auto control.	Duing start up R1410 bed #2 quench valve positioner stopped working	28	Closed	12/17/2011 9:30:00 AM	Richmond CA - Refinery	28118
(1) Oils planning group requested sitemate, atypical route for T-1287 contents, (2) No communication that B&S temporary procedure cased for blocking in of T-579, (3) Stop Work. Authority was not used when teck of MOC process/ procedure was motived and questioned.	NL-Operational Process/Procedures Plant Run Out/Stow Down	INVITAL DESCRIPTION: SEE LINK ATTACHED IN INVESTIGATION FOR COMPLETE TOP REPORT. ON 12/15 at 11:00 am 1-1287 in the Main Tank Field was set up to go clined to the JHT Plant (Dypessing 7-679 but using it's feed manifold). T-1287 than feed dract to the JHT Unit 12/16 at 18:00 when DSR19 2 abd cut was switched from DHT to the JHT. This switch was too much flow for the JHT to feed and it took the path of least resistance to T-1287. On 12/16 at 18:00 the JHT this switch was to much report at 18:00 T-1287 at carge direction and began to back fill unit it was questioned on 12/17 at 04/30 and actions taken to correct the backwards flow.	T-1287 received backflow from JHT production via T- 679 manifolding	Cog .	Closed	12/15/2011 11:00:C0 AM	Richmond, CA - Refinery	28116
1160 / F-1100 CEMS legal requirement, (5) Vieve left closed from V-1103 to C-1100 causing PRD belows to leak	NL-Lessons Leamed	crude unit start up lessons learned from NLI	Crude unit start up issues / lessons learned	Near	Closed	12:00:00 AM	CA - Refinery	28100

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Loss soon. Green Card, Need at Meast crosswellt, in the painted. Lotal Localizat; Xylane St. EE Upped and fell Loss Marying foot 198 1013 F-1551 AXI Up to 13th V Green Card. A light point conducts toose and a best in missing a nat.

Green Card. We need a crossweak to the painted on Nytwee St., about 190' NS

of processing St. to help about down raths, because a local to cross here in the
macrines For 2 it resides? 15th Heminopia 4 eliminate it presso life, y unclus, do no novell, Euden for edity Nice 4 eliminopia (15th y unclus, do no novell, Euden for edity Nice 4 eliminopia (15th Eugen) no ri 15th author to 17th Luis a nonvaledadelle addition para le pa poola (15th Eugen) eliminopia Green Card. Loading revep is falling apart. Heads repair or repleased. Reling is exactly and falling apart. R. Irjany/Zavess . Employee Injury Contractor Injury H. Regulatory Complance - Permit Exceedance Equipment/Property Demays NL-Injury/Enoss -Employee injury ML-Lasagns Learned NL-Lessons Learned AT-Fessous Teamer NL-Quality - Product Quality (Int) Lessons Learned (1) Flarning for it is delivery of the olde to the alle was inadequate. The earthst feet was unities of their responsitions. (1) EE dd nei hawr eyn'i en paft, (2) EE dd nei hawr eyd'i en gaft (1) Cal gas misma abbided causing Functo exchance guased to more reaching in a bad caritration (1) Opwister was taught but can't relate knowledge to work is job. (1) Flarning for the colory of the pipe to the sits was inadequate. The excost team was unotear of their responsibilities.

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		Green Card. At 91 Gate parking lot there is some parking spaces with feded	Green Card, Parking spaces with faded simps	Near	12/22/2011 5:40:00	Richmond, CA -	
	NL-Lessons Learned	Green Card. The stripping on the road entering Gate 91 is so laded that it's hard to stay on the right side of road.	Green Card. Re-stripe rosd entering Gate 91.	Near Closed Loss	12/21/2011 5:00:00 AM Cit	Richmond, CA - Refinery	29056
	NL-Lessons Learned	Green Card A crosswalk on Xylena St. by Newtron needs to be painted. A bX of us are using the old crosswalk that has a bt of paint missing. We need comeone to came out to see what needs to be done.	Green Card, Crosswalk needs to be painted, Location: Xylene St	Near losed Loss	12/18/2011 5.40:00 AM CI	Richmond, CA - Refinery	29053
(1) Root cause can only be identified when the flange, boils, and gaskets are openned up an inspecied. This will require a part gaskets are openned up an inspecied. This will require a part part shuddown. The next opportunity to do so is (12013 HZA Major, "Since the root cause is not known at this time. It is cannot be positively identified. Therefore, the reacting actions cannot be positively identified. Therefore, the result of the state of	Equipment/Property Demego	While doing their first rounds on 12/12 dayshift, the AO3 area operator discovered the upstream flange of PSV-316A (IX-3472) leaking (H2 tube side of E-305A H2A Trein A-cell WHB outet).	H2A E-305A WHB · Leak on Upstream Flange of PSV-316A (IX-3472)	Closed Loss	12/12/2011 12:00:00 AM Ck	Richmond, CA - Refinery	29022
	NL-Lessons Learned	Green Card "SAFETY SUGGESTION" - Improve lighting conditions in front of the Tech Center.	Green Card. "Suggastion": Improve lighting conditions, Location: Tech Center	Near Closed Loss	11/27/2011 6.00:00 Ck		29020
(1) The Air Team did not identify and communicate the need for the pilot and purge maters to be calibrated annually. Full 5 Why document is evaluable the investigation Journal box.	NL-Regulatory Compliance - Non Compliance - Air	On December 7, 2011 it came to the attention of the GHG Air Specialist that the referry had not completed the annual collorations of the flare pilot and pure Natural Gas maters. This is a requirement of the newly implemented EPA and CARB GHG regulations.	Potential non-compliance of GHG reporting requirements	Near Closed Loss	12/7/2011 12:00:00 AM Cir	Richmond, CA - Refinery	29016
(1) do not need an investigation for this because leaking pigtails on our H2 reformer furnaces are en accepted occurrence that we manage reactively.	EquipmenUProperty Damage	Ops reported what appears to be pig tall leak on F-302 B cett. Upon Inspection tubes 22 and 23 will have to be pinched. Ope reported pigtail teak on C cell A Yalin.	Pigtell leak F-305 B cell	Closed Loss	1/2/2012 10:00:00 AM Cit	Richmond, CA - Rafinery	28961
	NL-Operational Process/Procedures - Safely Systems	At - 04:15 the GHT fumous birtily want to min first. Operation of PC 725 is suspected as being the contributing cause, Clonice value was inooperative and bir-passed at the time. This isover machine valuerable to changus in retinary steem passavar), inormal fornity was quickly as —stabilished and it was not necessary to route dissell product of test.	DHT furnace brisfly went to min fires due to operation of 16PC725	Closed Loss	1/1/2012 4:15:00 AM Cit	Ricamond, CA - Reinery	28935
(1) Operator entered an incorrect selpoint for the ID fan on the DCS which caused high funnace box pressure, resulting in the plant tripping to minimum fine. In the past he did not enter the cercet selpoint and no loss occurred. (2) The system is designed in such a way that errors in entering a 60PV314 selpoint and unable to be detected before an incident occurs. (3) The plant shut down due to low fuel gas pressure because the Operators did not blook in all of the min fine burners before re-setting the min fire high Crew teamwork during work does not effoctively reinforce expociation of procedural usage.	Operational Process/Procedures	On December 30th CO2 operator was making adjustments to PC-318 and want to enter an output of 85% and entered 6.0 instead. When PC-316 closed off to 85% the furnace tripped and went to min fire (per procedure) while attempting to rest the furnace high fuel gas / low steam flow completely chooped the furnace.		Closed	12/30/2011 2:30:00 PM	ė.	28917
(1) Operator enlared an incorrect estipoint for the ID fan on the DCS which caused high furnace box pressure, resulting in the plant tipping to minimum fire, in the past he did not enter the accordance of the property of the enter the correct selpoint and no loss occurred., (2) The system is designed in such a way that errors in entering a COPV314 selpoint are unable to be detected before an incident occurs., (3) The plant shut down due to low fuel gat pressure because the Operators did not block in all of the min fire burners before re-acting the min fire tip Crew teamwork during work does not effectively reinforce expectation of procedural usage.	Equipment/Property	On December 30th CO2 operator was making adjustments to PC-318 and went to enter an output of 88% and entered 8.0 Instead. When PC-318 closed off to 8% the furnace tripped and went to min fire (per procedure) while attempting to rase the furnace high fuel gas I low sharm flow completely choosed.	H2A insdvellant tip due to F-305 min fre and full chop FSC trip	Closed Loss	12/30/2011 2:30:00 PM Cre	Richmond. CA -	289:7
(1) Operator entered an incorrect estpoint for the ID fan on the IDS which coused high furnace box pressure, resulting in the plant ripping to minimum fire. In the past he dd not enter the correct selpoint and no loss accurred., (2) The system is destipated in such a way that errors in entering a 00PY311 selpoint are unable to be detected before an incident occurs., (3) The plant shut down due to low finel gas pressure because the Operators did not block in all of the nith for burners the Operators did not block and of the roth for burners of the Operators due to be observed the Operators due to block and of the orth for burners the Operators due to block and of the orth for burners does not effectively reinforce expectation of procedural usage.	Environmental	On December 30th CO2 operator was making adjustments to PC-318 and went to enter an output of 88% and entered 8.0 instead. When PC-318 closed off to 8% the furnace hipped and went to min fire (per procedure) while attempting to reset the funnace high fuel gas / fow steam flow completely chooped the furnace.	H2A inadvertant trip due te F-305 min tre and full chop FSC trip	Closed	12/30/2011 23:30:00 PM Ck	Richmend, CA • Refinery	28917
	NL-Lessons Learned	Green Card, Molor for sample box is leaking dessi at T-3215.	Green Card, Motor for sample box leaking diesel. Location: SP Hill T-3215	Closed Loss	12/19/2011 9:00:00 AM CIC	Richmond, CA Refinery	28666
	Contractor injury	hard to see due to the fading paint on stripping and very poor lighting.	Less Location: Gate 91	Closed Loss	AM. CIO	28664 Refinery	28664

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	29098	29078	29069	29061	29059	29090
	Richmond, CA - Refinery	Richmond, Refinery	Richmond, CA - Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA Refinery	Todas trailing
	1/5/2012 1:45:00 AM	1/4/2012 1:00:00	11:30:00	12/27/2011 6:40:00 AM	8:15:00 AM	4-
	Clased	Clused	Closed	Clased	Closed	Cicoon
	Loss	Loss	5 8 8	Near Loss	Lass Lass	r,waa
	Operator reported pain in elbows when turning valves	Front lite made contact with gaund ras white parking lite tuck.	HNC down due to leek on leed chack valve	Green Card. Crosswalk on Xylane St needs to be repainted.	Green Card, 17 Pump Station handrall on stars needs repair.	
	Operator reported feeling intermittent pain in their abows.	While padding at T-3106 driver moved truck so vec. fuck would have access to the work area. Driver pulled fuck (coward and made contact whith the gourd rail and like popping line life, it o other denings to the veriade was noticed.	In Addent Summary. The Hawry Naultal Cracker at RLOP was without feed for approximately 3.5 deps while a beak on the high pressure leed check valve was campes. 2. Background: As part of RLOP's 402011 Major Turnaround was campes. 2. Background: As part of RLOP's 402011 Major Turnaround deasembles. The Hydroprocessing Backflow Provention Bast Practice (attachment #1) recommends citical check valves are inspected and serviced during wary Major Turnaround. As a result, all critical check valves (read checks and wash water injection check valves) were inspected and serviced the Association of the 100 Major Turnaround. As a result, all critical check valves (read checks and wash water injection check valves) were inspected of as serviced in the past. The NIC Badd check tead valve had been inspected as a serviced in the past. The NIC Badd check tead valve is a water style valve manufactured by Hy-Grade with critical and unique characteristics (altichment #2). It was contracted out to Bay Valve to open, happed and then bench tested at 975 PSI [Passed]. It was then put bean inspected and serviced in the past. The NIC Badd check tead valve happed and then bench tested at 975 PSI [Passed]. It was then put back into service at the PAIC. No Issues were reported with the check valve flugical and explored in the NIC Condition of 1211. Stop which was found on the HINC Food Check valve drophage at effects at a rate of 12 drisp per minute of 1211. Stop with Madasenance related chement #3). The HINC then prefer do in 1212 with Madasenance related for a dening the opposite of with the base of a social from the Condition of 1211. Stop Work Authority (SMA) was used to keep feed out to the HINC Condition of th	Green Card, A crosswalk on Xylene St. needs to be repainted because old paint on crosswalk is fading away.	Green Card, 17 Pump Station handrall on steirs needs repair.	out suipe mies, rise o to see when it is dark in the monning.
•	injury/iliness	Transportation	Business Process	NL-Lessons Learned	NL-injury/liness - Contractor injury	ME-FRASOUS FRAUDO
(1) Lack knowledge - Lack of understanding of overall refinery operation. RLOP does not understand how the RLOP GRUB	(1) The Eibow Pain reported by the operators was determined to be a Non-Industrial injury. This clid not happen at work.	(I) "FIVE WHY" One Page Report Incident Number twast. ID 17638 Business built B&SAUES Maint. Location T-3105 Floribly Name Incident date 1442012 Type of Process: NA Type of Equipment: 34 on truck team Members: Geg Lowe Outsi Reyndels Rey Crane Incident Description: What: While particle at 13105 Glovel moved funck so vac. Work would have access to the work man. Driver pulled truck forward and made contact with the guest rail and tire peopling the life. We other damage to the while was noticed. Where (Incident on where In the process): B&S T-3105 When; 1442012 How where In the process): B&S T-3105 When; 1442012 How where In the process; B&S T-3105 When; 1442012 How where In the process is the why issue shall needs to be addressed?): Tire but air, FIVE WHY'S 1. Why did "above happen?" Verification Vinked in made contact with grad the process of the work to make room for equipment access. 4. Why did "3 happen? The mechanic definit ask for help when moving the wehicle in a congested area. 1. Why did "3 happen? BWD TO LOUISE: The mechanic definit ask for help when moving the wehicle in a congested area. 1. PS Factor B. In past, did not follow procedures or acceptable practices and noticelent accurred. 1-People in because history of not follow procedures or acceptable practices and noticed make the consequence "FIVE WHY" (one Peig Report Incident Number Ivest. ID 17038 business Unit B&SAUE Maint. Location T-3105 Facility Name Incident Bay Crane Incident Description; What kniwal and made conflect with the guterd will and fine popping the life. No other damage to the work area. Driver pulled truck toward and made conflect with the guterd will and fine popping the life. No other damage to the work area. Driver pulled truck toward and made conflect with the verific was a noticed, White per force of the verific was noticed.	(1) Lack Of Skill or Knowledge			

20226	292-3	29203	29140	29122	29119	20 105
Richmend, CA - Refinery	Richmend, CA - Refinery	Richmond,	Richmend, CA - Refinery	Richmend, CA - Refinery	Richmend, CA - Refinery	Richmond,
1/9/2012 12:15:00 AM	1/8/2012 3:02:00 PM	12/28/2011 6:00:00	1/5/2012 2:00:00 PM	1/4/2012 3:00:00 PM	1/4/2012 9:00:00 AM	11/28/2011 63/0:00
Closed	Closed	Closed	Closed	Closed	Closed	Closed
ا دوء	Near Less	Loss Name	Loss Near	Near	Near	Noar
rali car deraliement on	FCC flare totalizer tripped due to shuldown of K-130 wel gas compressor	RLOP B-Crew worked without a qualified Head	sool found in the bey ground Moonlight Venture	Green Card, Step is 12" drop. Location: Long Wharf, Eastside of Berth 4	Usad wrong vehicle to push a disable vehicle.	High H2S raphtha in T- 1287 following RLOP GRU
INITIAL DESCRIPTION: SEE LINK ATTACHED IN INVESTIGATION FOR COMPLETE TOP REPORT. The unit operator switched the tract densies from opon to close, he did it because he was preprinting the #54 tract for the rail carrendor. He thought it was dosed but it was open to start with. So he accidently put the tract densier into the wreng position. Then the operator faxed the switch paper work signed to the scale house. Then the rail serve operator moved the trail one not but stack which devailed the rail car.	While shuffing drawn the FCC unit K-130 (well gas compressor) suction pressure controller, 52PC (100A, opened and briefly vanied axcessive pressure to relief causing a trip of the FCC tolarizer.	RLOP B-Crefy worked without a qualified Head Operator on Day-Shift 12-28- 2011. Luckily there were no incidents or energencies.	Sool found in the water of betth #1 around the Assonlight Venture which is believed to have been discharged from the ship*sootling water discharge port. The Ship's Capitain and Engineer both denie soot was released from this vessel.		Technidan notice that his wohld o wouldn't start so toch called another toch to help push start the vehicle. Hand pushing it didn't do the job. Tech thought there wasn't enough spaed so he used enother vehicle to push the vehicle that had the dead battery. This caused a mark on the fronts of both vehicles.	l
Equipment/Property	NL-Business Process - Business Process	NL-Business Process	NL-Environmental - Spill - 3rd Party	NL-injury/iliness - Contractor injury	NL. Equipment/Property Damage - Equipment Damage	NL-Quality - Product
(1) Lighting to the indicating equipment was not functioning, no power (for years), (2) Operator did not double check the detailer position, (3) -tight to bits for werning devices at microse sor not available (we are not saying working as that was addressed as a key factor). A side issue is that opporations has no light builbs for the working units if they were to fail. This is a 24f operation and they need these supplies on hand, (4)-time lighting in the railser switch area.		(1) Why did B-craw go without an HO? On- craw HO was on vacalism and bactup HO schoulded for that day called in AB-109 just before the tegrinning of the set. No other qualified HO3 was available for coverage? Standby person was qualified HO3 evallable for coverage? Standby person was not HO-qualified HO3 evallable for coverage? Standby person was not HO-qualified HO3 evaluation and alther side of this B-craw set. A-craw has only one qualified HO2 has set on right and had worked 10 hours the previous day to help cover an HO stontage. C-craw's only qualified HO was on vacalition. Conf. y qualified HO was on vacalition. Conf. y qualified HO was on vacalition, Conf. y qualified HO was on vacalition. Only qualified HO was divided in the vacalion day he produced day to cover the consider by here craw was short a CO and HO. Why did personnel policies (vacalion, standby, ACP etc.) no provide over age for this scannifo, where an HO is on vacalion and presented to (back-up) pails in AB-109 after coverage for this scannifo, where an Hod galler devantage in this scannifo, the provided presented been put in place? Applicable policies and endingent and the presented of the parts take been put in place? Applicable policies and servicement of these policies are insidequate.	(1) Lack of accountability from the Masters / Expectations were not clearly defined			is used and the limitations. 5 Why 1. Why did 1-1287 have high HESP - RLOP GRU desiliablion temperatures were low and unsable from 1128-1214 while GRUB was routed to 1-1287 [Please note, outing timing is based on lank rise and B&S turnovers. RLOP turnovers are not clear on liming). HESS should mornally go through C-1910 overhead to 4128 or hmough C-1910 overhead to 4128 or hmough C-1910 overhead to 6140. So the paratures, HESP turnovers are not clear on liming). HESS should mornally go through C-1910 overhead to 6140. So the paratures of the impression that 1-1287 is an 'off teat' noting. This is not frue, 3. Why does RLOP teat' 1-1287 as on 'off test impression that 1-1287 is on 'off test' moting. This is not frue, 3. Why does RLOP teat' 1-1287 as on 'off test impression that 1-1287 is on 'off test' moting. This is not frue, 3. Why does RLOP test' 1-1287 as on 'off test impression that 1-1287 is on 'off test' moting. This should be routed finite of the RLOP GRUB it used and the limitations. (2) inscending of overall refinery operation. HLOP does not understand how the RLOP GRUB it used and the limitations. (2) inscending to have shall in the shall be used to hap it is used and the limitations. (2) inscending to have shall be required to 1-1287 in 845. by it is used and the limitations. (2) inscending to have shall be required to 1-1287 in 845. by the shall be required to 1-1287 in 845. by the shall be required to 1-1287 in 845. by the shall be shall be removed the shall be required to 1-1287 in 845. by the shall be required to 1-1287 in 845. by the shall be required to 1-1287 in 845. by the shall be required to 1-1287 in 845. by the shall be shall be removed to 1-1287 in 845. by the shall be required to 1-1287 in 845. by the shall be required to 1-1287 in 845. by the shall be required to 1-1287 in 845. by the shall be required to 1-1287 in 845. by the shall be required to 1-1287 in 845. by the shall be required to 1-1287 in 845. by the shall be required to 1-1287 in 845. by the shall be required to 1-1287 in 8

			Short on a solenoid	<u>, , , , , , , , , , , , , , , , , , , </u>	12/2012	Richmond, 1/12/2012	
	NL-injury/IIIness - Employee injury	Green Card - Contractor vehicle leaving B&S Cirl RM parking let did not secure tools (sew, leps measures etc.) that could fell out when vehicle is in motion.	Green Card - Timec vehicle leaving B&S Cirl RM parking lot did not secure tools	ed Loss	1/12/2012 8:45:00 Clased	Richmond, 1/12 CA . 8:45 Refinery AM	29443
	NL-Transportation - Contractor	Green Card - Contractor vehicle leaving B&S Ctri RM parking ict did not secure tools (saw, lapa magsures sits,) that could fall out when vehicle is in motion,	Green Card - Times vehicle leaving B&S Ciri r RM parking lol did not secure tools	ed Loss	1/12/2012 8:45:00 AM Closed	Richmond, 1/17 CA - 8:45 Refinery AM	29443
	NL-injury/linese - Centractor injury	Green Card - Contractor vehicle leaving D&S Ctrl RM parking let did not secure looks (saw, lape measures etc.) that could fall out when vehicle is in motion,	Green Card - Timec vehicle leaving B&S Cirl RM parking lot did not secure tools	Near Loss	1/12/2012 8:45:00 AM Closed	Richmond, 1/ CA - 8: Refinery A	20443
(1) Coveral legs were to long and cause a tripping hazard, which were not addressed by EE	injury/iliness	EE injured hit shoulder when he was waiting out of 5 Cat. He was waiting over a platform when he tripped and feli. He stop his falt with his hand hjuring hit shoulder.	EE tripped and fell and injured his shoulder	ad Loss	1/11/2012 3:50:00 Closed		29398
	NL-Business Process - Business Process	GHT E-1679 reboller steem leek on bottom flange of pot due to startup/shuddwin heat cycle.	GHT E-1679 reboiler steam leak	Near Loss	1/11/2012 3:30:00 PM Closed	Richmond, 1/11 CA - 3:30 Refinery PM	29396
(1) Why did the finger get phothed the finger got phothed because the jack sined (ell off the fork lift. If feel off the fork lift because boat was not lied down, It was not lied down because EE was in a hurry.	injury/illness	EE was picking up a jack sland and the head sid down and pinched LH Index finger.	EE was picking up a jack stand and the head slid down and pinched LH index linger.	ross Ed	1/11/2012 1:30:00 Closed	Richmond, 1/11 CA - 1:30 Refinery PM	28393
(1) pinch point	esaulijā.	pipetitier was atlengting to tape a weld blankel onto the end of a section of pipe to prepare the fine for welding. The section of pipe was had one end supported atop a pipe support with a faffon bumper beneath it to allow for shritting of the lines on the support. According to reports, the end of the pipe that was to be teped vas being supported with one hand by the fifter, while the other thand was to be teped vas being supported with one hand by the fifter, while the other thand was to be used for taying. The line slipped on the Teffon bumper, causing the end of the pipe had in the piperitar's hand to rotate, thus pinching his ringer between the pipe and a rock.		ad Loss	1/11/2012 8:69:00 Closed	Richmond, 1/ CA - 8: Refinery Al	29385
(1) Employee did not doff his gloves in a safe manner nor did he take extra precaution to protect himself from the possibility of polson oak in the area.	injury/lihess	Employee rollized signs of poison tak exposure on Tuesday evening, 1/10/12.	Employee was exposed to poison oak	ed Loss	1/10/2012 8:00:00 Closed	Richmond, 1/10 CA - 8:00 Refinery AM	29380
(1) 1. Why were items that were cartified in the rep telter as going to be complete, not complete, put they ast, this had occurred without consequence, 2. Why had it occurred with no consequence? HES had responsibility for the rep letter development, but could not control folks who were responsible. 3. Why is the responsibility for the Rep Letter with HES? The current system has HES produing oversible for the development of the letter, pulling logalither the outstanding sause and leading them to completion. 4. Why is the system so up the way it is? Did not realize that by sating it up this way, there would not he the level of commilment necessary to assure completion of scilin flems in the time frame commilment. 5. Why was the not articipated as a possible gap in the process or corrected once it was identified? There has not previously been the iswel of scrifting for the accuracy of the report as there was in 2011. It was acceptable to have some commilments not meet the target. This is no longer that case, requiring the process to be revised to belter manage the completion of all commilments in the Rep letter by the end of the year.	NL-Regulatory Compliance - Non	Several HES requirements, including audit action items, training, and Refirery instructions, were not completed by December 31, 2011, as certified in the Richmond Refirery's year-end HES compliance eartification process. This process completes all un-completed HES requirements, such as Iraining, CAP lasts, PSSRs, audit action fems, etc, including those certified to be completed before year-end.		Near Loss	1/2/2012 12:00:00 AM Closed	Richmond, 1/2/ Romany AM	29330
(1) the multi lool with a non locking blade is act a company issue bod, company issue knifes have locking blades to prevent his issue	injury/iliness	A company excluden was inspecting and testing 115 volt extension code in the Electric shop. As part of the inspection the electrican was rolling the cords and tying the cords with Marior. The electrician was reling the cords using the cord toling machine; once the cords were rolled he cut the Write with a multiple concept once and reached incide the machine to cot the twine with the first rolled a cord and reached incide the machine to cot the twine with the krife in the open gostlion. When he neached into the machine the blade hit the side rall which caused the knife to close on his index finger.	Cut lo Index finger	Loss	1/10/2012 10:30:00 AM Closed	Richmond, 1/10 CA - 10:3 Refinery AM	29326
Operator reported first aid fate because management did not communicate the need to report first aids immediately to STL.	injury/iliness	DBR Operator reported sore shoulder and fcol to dinic-late reporting from shutdown.	Operator sore shoulder and fool	ed Loss	1/5/2012 5:00:00 Closed	Richmond, 1/ CA - 5: Refinery PI	19273
	NL-Businass Process - Businass Process	Loio Key 2037 missing, Need CFD to open.	LOTO Key 2037 missing	Near Loss	1/9/2012 4:31:00 AM Closed	Richmond, 1/9/ CA - 4:31 Refinery AM	29272

••••••	Richmond, 10/17/2011 CA- 12:00:00 Refinery AM Cit	Richmond, 1/18/2012 CA - 8:30:00 29837 Refinery AM Cto	Richmond, 1/18/2012 CA - 8:30:00 29837 Refinery AM Cit	1/18/2012 5:40:00 AM	Richmond, 1/19/2012 CA - 10/25/00 29807 Refinery AM Ck	Richmond, 1/17/2012 CA - 9:35:00 29734 Refinery AM Ch	Richmond, 1/16/2012 CA - 4:56:00 CB Refinery AM CK	Richmond, 1/12/2012 CA - 12:00:00 29610 Refinery AM Ck	Richmond, 1/12/2012 CA - 12:00:00 29610 Refinery AM Ck		Richmond, 1/12/2012 CA - 10:40:00 29542 Refinery AM CA	Richmond, 1/11/2012 CA - 4:27:00 29490 Refinery AM Ck
	Closed	Closed	Closed	Closed	Closed	Closed	Clo \$60	Closed	Closed 1	Closed	Closed	Ciosed
	St.	Near Loss Fo	Near Loss Fc	Loss D&	While Coss eye.	Loss X	Loss	Coss ex	Loss Co	Near 3	Loss Pro	Coss (crit
	Stack Gas source testing was performed outside required parameters for Consent Decree	Fcc flare totalizer trip	Foc flere totalizer trip	toss of electrical power to D&R/NHT plant	le replacing a valve the hanic got a few drops esel on his cheek &	Worker sustained contusion to finger white moving large tool box	HNIF 220 routed of test	Contractor employee exposed to poison pak.	Contractor employee exposed to poison oak.	3" edwards valve feiture	Suitur excursion, routed product off test for 6 - 8 hrs.	Start up of K-130 wet gas compressor resulted in a trip of the FCC flare totalizer
	9.4 %	Al 8:30 am 1/18 white water washing E-1052 due to bisulide plugging, RLCP V-1900 automatic level controlled opened and drained the level. The combination of these 2 events triggered a short coalizer trip at the FCC flare.	At 8:30 am 1/18 white water washing E-1082 due to biswifde plugging, RLOP V-1900 automatic level combined repend and drained the level. The combinedion of these 2 events inggered a short totalizer trip at the FCC flare.	Loss of power NHT due to 12-517 breaker opening on relay action "GROUND- OVERCURRENT". This electrical outage @ NHT caused a loss of 5 CAT, PENHEX & a feed cut at TKN.	While replacing a valve the Operator and Mochanic had completed the JUSUJHA and LOTO. The mechanic was wearing the proper PPE including salely glasses. They had removed the both from one side of the valve and were removing the boths from the other side. The line shifted while opening the flange and product that was leying in the line spieshed up under his salely glasses.	Two Laborers, were moving a Weather-Guard tool box which was on the bed of fulf-sized pickup track. They were skiding it across the bed with each of them on opposite eross of the tool box, one was pushing and the other pulling. Employee had his hand between the end of the tool box and the end of the bed of the pickup closest to the cast. The tool box moved towards the esh and caught the employee's finger in the pinch point created by the bed and the box.	At 4:55 AM the RLOP HO Informed the STL that HNF C-1650 bottoms was routed off test due to a Vis of 19.9 with a spac of 40.0. Furthermore he elso informed the STL that the 220 block switch, which was performed saffer in the morning was mismanifolded. HNF was schually feeding from T3157(AR tank) vs. T316/162(Na.y.) 220 intermediate tank). This was also manifolded correctly about 4:50 AM.	Contractor employee was exposed to polson cak.	Confrador employee was exposed to polson cak.		DHT product suffur went high and the product was routed off test. The feed suffur was going up due to moves at the crude unit to gulf more naiphtha, which makes the clearly theavier, Heavier diesel means more suffur that is harder to treat. This requires temperature to be raised in the DHT reactor.	pressure caused the natural gas makeup controller, 52PC-100B, to open in an attempt to stabilize the system pressure. The valve over-compensated and the pressure rose above selpoint causing 52PC-100A to open and vent to relief as dastigned.
	Regulatory Compliance	NL-Regulatory Compilance - Permit Excepdance	NL-Lessons Learned	Business Process	injury/liness	injury/iliness	Operational Process/Procedures	NL-injury/ilinass - Contractor injury	ssauliykinfut	NL - EquipmentProperty Damage - Eqvipment Damage	Business Process	NL-Environmental - Release
(1) 5-Why: Why did the company Incur e late charge for the X-Ray Equipment Radiation. Why: 1: Because the payment	(1) See Journal Tab for full 5 Why documentation. The confractor did not follow the instructions for the sampling requirements for this source test provided by Chevron. (2) The QAVQC courried too late in the year to discover the problem and set up enother source test	(1) No Communication of Water wash On E-1050's and automatic level control of a high tevel in vessel V-1930 in RLOP combined to trip fee totalizer	(1) No Communication of Water wash On E-1050's and automatic level control of a high level in vessel V-1900 in RLOPcombined to trip (cc totalizer	(1) The mechanic that installed new space heater wiring was not properly trained to understand the potential hazard heathe was creating by not routing the new space heater wiring where the cid wiring was routed.	(1) Mechanic was not wearing a face sheld white opening a france (2) Mechanic was not wearing a face shelid white opening a france.	(1) Inaliention to lask at hand by worker	(1) Contributing Factor, Procedure does not prompt console president to wrifty tank drop until a few findure after change in teed routing. Doing this earlier could have reduced time that it took to discover the mis-stignment. (2) EE failed to recognize risk that he could be opening up worng find on that he was doing this differently from how he had done it in the past, As a result, he didn't pause to get chiefer browbed to heigh. (3) a Contributing Factor. Additional labeling of lines would have helped clear up EE confusion. (4) EE failed to recognize risk that he could be opening up wrong line or that he was doing this differently from how he had done it in the past. As a result, he didn't pause to get to there's would do neigh.	(1) aware of there sourcundings	(1) aware of there souroundings	(1) Edwards valve bushing stripped out.	(1) The 4CU PCO was pulling more naphthe in order to minimize 80% point spec glyeaway on the diesel. It is known that this action will increase into emound or sulfur sent it to the DHT. The 4CU PCO should therefore notify the DHT PCO so that they can procedified in reactor CAT temperatures to treat the swife sulfur.	

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	30982	30087	30028	30020	30012	20861	29916
	Richmond, CA - Rannery	Richmond, CA - Refinery	Richmend, CA Refinery	Richmond, CA - Refinery	Richmond, CA Refinery	Richmond, GA - Refinery	Richmond, CA - Refinery
	1/23/2012 5:00:00 FM	12/31/2011 12:00:00 AM	1/23/2012 12:01:00 AM	1/22/2012 8:45:00 PM	1/21/2012 7:00:00 AM	1/16/2012 12:00:00 AM	1117/2012 12:00:00 AM
	Closed	Closed	Closed	Closed	Closed	Closed	Closad
<del></del>	Loss	Loss	Hear Loss	Near Loss	Near	Near	Loss
A 2011 PHA of the HNF Facility found the following issue in the High Pressure to Low Pressure Separation to Low Pressure The polonilation varies and the High Pressure Separation from V-1610 to V-1620, exceeding the PRD relief	loss of UPS power to 17	Monthly routine duties incomplete for real vs auto checklist	6-2 feeder (480 vt) circuit branker trip.	Shutdown of K-1060/1070 un a V-1051 Figh level. Tripped the FCC lotalizar.	Oil in Impound Basin drained from T-3102 roof drain	Tank 3157 taken below fow pump out.	Registration payment for two X-Ray units was missed and late charges incurred.
During the 2011 HNF PHA Reveildation, an action item was essigned to perform a Safety Objective Analysis (SOA) on the vapor blow through case	During the last Uninterruptable Power Supply (UPS) inspection performed by Lebert Services, the UPS at 17 pump station was identified as needing the air filles on the unit replaced. Two Electric stop electricians period electricians were given a work order to replace the fillers, the electricians put the UPS in Alleitenence bypass to open the droot and replaced that fillers. Choot the fillers were in place tray began placing the UPS to normal using the selectro the fillers were in place tray during that process the UPS to normal using the selectro to start up causing a loss of the RIE.	The Monthly Real vs Auto Charddist for the CFO job roydine dulles on 8 Crew for Dec 2811 was incomplete at end of Dec 31st.	6-2 Feeder (480 volt power chous) discovered tripped effecting penterner (cld way) loading racks.	During a water wash of the E-1051/1052, the plugging trake free and filled up	Operator making his rounds found oil in T-3102 roof drain seperator and impound basin.	R LOP made a production feed switch within (her unit from T-3159 to T- 310/13/62 and 64 not resize i that and error was made during their switch. They started freeling T-3157 which was near low pump out. Tark movement a	QCD had received paperwork for the payment of registration fees for two X-Ray Concreting pieces of equipment purchased through them. QCD had solitived that the refinery Radiation Safety Officer was responsible for paying the less, write the Radiation Safety Officer had thought purpment would be completed by QCD. A note regarding delinquirity payment is from the California Department of Public Health was received. Total additional fee is on the order of \$200.
	Operational Praceas/Pracedures	Business Process	NL- Equipment/Property Damage - Equipment Damage	NL. Environmental -	NL-Environmental - Sp.if	NL-Operational Process/Procedures - Safe Operating Limit (SOL) Exceeded	Regulatory Compliance
(1) I - Why were the risks associated with upsizing the level control valves on the downstream equipment not recognized?  - Because, there was no discussion about the policinal impacts of upsizing the level control valves on the downstream equipment during the project PHA. 2- Why wasn't there a discussion about the potential impacts of upsizing the level control valves on the downstream equipment during the project PHA? - Because, upsizing the level control valves was not in the scope of the project PHA. It was the assumption of the PHA team that I any additional changes were made to the acope of project, the risks of those changes would have been assessed through the MOC	(1) incident describtom Two Electric shop electricions were given is work order to replace the filters, the electricions put the UPS in Malmetance bypass to open the doors and replace the filters. Once the differs were to place they began placed to the UPS to normal using the selector handle on the root panel, during that pocases the UPS select handle on the root panel, during that pocases the UPS select the RIE, FIVE WHYPS the object of the root of th	(1) incomplete (dectronic) monthly duty expired without HO or STL review and action taken to get the missing duties entered.	(1) Management has made a business decision not to spend capital dollars to replace old power lines	(1) Why did FCC tip shelf file lotalizes Because K. 1060/1070 shaddown. Hyn did K-1060/1070 shuddown. Because V-1051 filed up with water Why did V-1051 file p with water Decause operations was water washing the E- 1051/1052 due to plugging Why was the E-1051/1052 plugging. Because C-850 in 8 plent has been unstable and accast flow from V-820 has been going back to V-801 causing NH3 to feath of find the relief system. NH3 with cause plugging in the overhead fin first at Flatre Gax Recovery. Additional Inding - Operation was standing by FGR during the water wash per cur proceduse. Due to the sevenity of the vester wash per cur proceduse. Due to the sevenity of the DP_A short films flater, 2 hour wash was needed before the plugging finally broke free. At that point, Y-1051 filled up so quickly, the high level shuddown as activated before the water could be shut off.	(1) No thorough MOC review process when the tank was converted to fuel oiligas oil service.	(1) Person chase not to follow procedure of excepted practice and does not hold themselves excepted for following	was never sent out on time. Why. 2: Payment invokes was sent to QCD who had believed the Redeliated Sately Officer was responsible. Why. 3: There was a miscommunication where two separate parties with ownership in the payment believed the other was making the payment. 8. California Department of Public Health assigns the ownership for renewal payment to the puctossing party. Whys. 4. No set agreement was in place for payment of the equipment.

(1) Outside repair facility repaired pump with a new (menartectured) shaft with (critical dimensions teken from the original shaft) however the impelier was not correctly focaled positioned on the shaft while using a vertical stacking method	NL-Lessons Learned	allachment to the structure, Localicn: South Isomax Fin Fan Decks		Loss	Closed	AM	Refinery	30228
		Green Card. Several broken and corroded welds on deck plating of E-130 fin far walkways and stainway landings. Getting to the point of questionable	Green Card, Broken/corroded welds on deck plating, Location; N.	Near	2	1/24/2012 8:00:00	Richmond, CA -	
	NL-injuryiliness - Emptoyse injury	At the above time, date and location is CVX EE was approaching the Main galls on floot to get a Temp Badge after Informing the MG Security Cificar that he has forgotten his badge, As the EEE washed towerads the Gate house from the has forgotten his badge, As the EEE washed towerads the Gate house from the posterian sidewark on the in-bound side, he did not notice that the in-bound gate arm was for the **rup** posterion. He mississery bought that the yellow and black painted lines on the ground were a crosswelk and proceeded to walk towards the MG Guard sheck in the yellow-striped zone, As he was walking in the yellow-striped zone, As he was walking in the yellow-striped zone, the Gate arm eams drown and entock its beckpack that he was carpling on his shoulder. The EE stated that he was not hun, and proceeded to work. A follow-up call to the EE from the MG Officer confirmed from the EE that he was not hun.	Refinery Main Gate: Entry	Noar	Closed	1/24/2012 6:53:00 AM	Richmond, CA - Refinery	30168
	NL-injury/iliness - Employee injury	Green Card. You need to feel your way in the dark and travel around obstacles in order to turn live lights on in room. The light swich is on the inside of another room. Localion: CMG insulation Ped, Fabrication Room.	Green Card, Poor lighting. Location: GMG Insulation Pad, Fabrication Room	L OSS	Closed	1/19/2012 6:D0:00 AM	Richmond, CA - Refinery	30133
	NL-Lessons Learned	Green Card. You need to feel your way in the dark and travel sround obstieds in order to turn live lights on in room. The lights which is on the inside of another room. Location: GMG insuisition Pad, Fabrication Room	Green Card, Poor lighting. Location: GMG Insulation Pad, Fabrication Room	Near	Closed	1/19/2012 6:00:00 AM	Richmond, CA Refinery	30133
	NL-injury/liness - Contractor injury	Green Card. You need to feel your way in the dait and taxel eround obstacts in order to turn the lights on in room. The sight switch is on the incide of another room. Localion: GMG insulation Ped, Fabrication Room.	Green Card, Poor lighting. Localion: GMG insufation Pad, Fabrication Room	Near Loss	Closed	1/19/2012 6:00:00 AM	Rictimond, CA - Refinery	30133
	NL- Equipment/Property Damage - Equipment Damage	Green Card. The heater in classroom doesn't work. When overloading with floor heaters, wo trip the breaker. Location: Honeley 8L, Eldg 317	Green Card, Heater in classroom doesn't work. Location: Hensley, Bidg 317	Near	Closed	1/19/2012 6:00:00 AM	Richmond, CA - Refirery	30131
	NL-Lessons Learned	Green Card. The heater in classroom doesn't work. When overloading with floor heaters, we trip the breaker. Location: Hensley St., Bldg 317	Green Card, Heater in classroom doesn't work. Location: Henstey, Bidg 317	Near	Clased	1/19/2012 6:00:00 AM	Richmond, CA - Refinery	30131
(11) 1- VMy were the fists associated with upsting the feval control valves on the downstream equipment not recognized? Because, there was no discussion about the potential impacts of typitaling the level control valves on the downstream equipment of the potential impacts of typitaling the level control valves on the downstream equipment during the project PHA? - Because, upsting the level control valves on the downstream equipment during the project PHA? - Because, upsting the level control valves was not into scope of the project PHA. It was the assumption of the PHA team that if any additional changes were made to the scope of project, the risks of those tranges were made to the scope of project, the risks of those tranges work made to the scope of project, the risks of those tranges work made to the scope of project, the risks of those tranges work made to the scope of project, the risks of those tranges work made to the scope of project, the risks of those scope of project, the risks of the scope of the project of the MCC. Stage Two Reviewer regime anyone to the project scope of project and process. Such that the risks of the scope of project and process are proposed to participations; the project of the risks of the scope of project and the scope of	NL-Operational Process/Procedures - Safety Systems	in this pressure separator. The Storagh Services are separator V-15 to its killy pressure separator (solid separator yet) pressure separator V-15 to its killy person resulting in loss of Right level to the high pressure separator V-15 to its killy person resulting in loss of Right level in the high pressure separator V-15 to its killy person resulting in loss of Right level in the high pressure separator V-15 to its killy person resulting in loss of Right level in the high pressure separator v-15 to its killy person resulting in this very resulting and resulting in the high pressure separator. The primary sating are overpressure of the low pressure separator. When volidating that the PSV-var on the low pressure separator. When volidating that the PSV-vas exponphishey steed to that PSV-vas understand for this case.	A 2011 PHA of the HNF Facility found fine followings are in the High Press to Low Pressure Separal level valves: The potential for vapor blow through from V-1610 to V-1620, in scenario LCV-16321 go wide open when there in co Rigid in V-1610. This seaves the entire capacity of the valve arrainable for flowing vapor only. In It case in the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leasured the capacity of PS 371 on V-1620 is not leas	Near Toss	Closed	12/5/2010 12/5/2010 12/00:00	Richmond, Refinery	30120
process. 3- Why weren't the risk of changes not assessed through the MOC process? - Because, reliet system reviews did not take pisce for the MOC. 4- Vhy relet system reviews didn't take pisce? - Because it's all the discration of the MOC. Stage Two Reviewer to require a relet system aview for a given MOC. In this case, no one was settingned to perform the relief system review. 5- Why didn't MOC Stage Two Reviewer angular system content system and process engineeting reviews? a Don't know-was not able to reach this inclinduals. O stamptions: C Did not recognize of the MOC stage Two Reviewers and sole to reach this inclinduals. O stamptions: C Did not recognize of the MOC stage Two Reviewers and sole to reach this inclinduals. O stamptions: C Did not recognize of the MOC stage Two Reviewers and sole to reach this inclinduals. O stamptions: C Did not recognize of the MOC stage Two Reviewers and sole to reach the did sole to stage the MOC stage Two Reviewers.	NL-Operational Process/Procedures - Preservor Relief Devices (PRD)	from the high pressure separator V-1610 to the low pressure separator V-1620 as a recommended by the Hydro Processing Vulnerabilities list. In this scenario, the liquid eveil control valve, LV-3211/V-322 (primary/spare), on high pressure separator. V-1510 is hilly open, resulting in loss of flaud level in the high pressure separator. Actived by high pressure vapor (Hz) bow through to the low pressure separator. This econotio may result in an overpressure of the low pressure separator and downstream equipment. The primary seleguard in his vapor blow through scomatio is pressure material device PSV-371 on the low pressure separator. When validating that the PSV-371 on the low pressure separator. When validating that the PSV-371 was another than the PSV-371 was understred for this case.	capacity on V-1820, in this scenario LCV-16321 goes wide open when hatel is no Rquid in V-1810. The leaves the entire capacity of the valve available for flowing vapor only. In this case the capacity of PSV-1630 is not large enough to pass the capacity of PSV-1630 is not large enough to pass the	Lass Neer	Closed	12:5/2010 12:50:00 AM	Richmond. CA - Refinery	30120

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30448	30429	30422	30400	30357	30355	30355	30354	30343	30301
Richmond, CA • Rafinery	Richmond, CA - Refinery	Richmond, CA - Rafinery	Richmond, CA - Refinery	Richmond CA - Rafmery	Richmond, CA - Ratinery	Richmond, CA - Rasinary	Richmond, CA 30354 Rafnery	Richmond, CA - Refinery	Richmond, CA - Refinery
1/28/2012 2:45:00 PM	1/28/2012 9:00:00 AM	1/27/2012 11:30:00 AM	1/27/2012 12:00:00 PM	1/21/2012 12:00:00 AM	1/17/2012 6:00:00 AM	1/17/2012 6:00:00 AM	1/25/2012 31/25/2012 PM	1/25/2012 12:01:00 AM	12/17/2011 1::00:00 PM
Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
Naar Logg	Loss	Logs	Near	Near	Loss	LO33	Near	Near Loss	Loss
Cygnus Voyager crew Gesconnected DCMA's Loss without permission	H2 A-Trein Fuel Gas Chopper was inadvertently closed while doing EBV checks causing the loss of H2 production from H2 A- Train.	contract EE injuried foot closing RR gate	4" of wash water found on T-3196 roof	Radio Dispatch Console intermittently feiling. Emergency alarms & Ione downs hindered	Firewater leak erosion of NH3 Loading racks railroad tracks	Firewater leak erosion of NH3 Loading racks retiroad tracks	Veolla driver failed to deploy the ground celbio white vacuuming product from a fire. Vaccum fuck parked on Standard Avenue and the vacuum hose was draped over the alde of the wall.	F1551 nearly exceeded the NOx emissions limit on 1/25/12	P-1165 pump could not be installed effer repairs were completed by outside repair shop.
The Cryprus Yoyoger completed its crude discharge at approximately 1410 free. The Berth #4 Operator drained the DCMA's (#2 & #4) and went to the DCMA's (#2 & #4) and went to the DCMA controllers (or the discontact from the vessel, Once there, the Berth #4 Operator noticed that both arms had effected by sense disconnected by the ships of the work and belier instanced and platfolic wrapped. This is a detailon from our practice of having the Operator belief present at the controller in control of the arms and plating than verbal of to disconnect from the vessel. This caudid have resulted in a spill, equipment demage or personnel failury.	While attempting to perform an EBV stroke check on MOV-380 (C-380, B-Train CO2 absorber) the OWS Operator furned the wrong CMC switch HS-3050 (H2 A-Train Fuel Gas Shuddown) causing the loss of ⪙ gas to M2 A-Train thus losing 94MSCFD of M2 production.	Contract Security EE working 31 gate, stated she injuried her left ankle closing RR gate	Chevran Tank Cleaning Supervisor discovered approximately 2" of standing water on T-3166 coof. Although nool is landed and cribbed, work has been shuddown and personnel removed from Inside of lank until roof is drained.	Dispatch Redio Console not dispatching nor could it received vital elems.	Underground fireweiler leak at NH3 Racks caused erosion of soil supporting track number 63.	Underground firewater leak at NH3 Racks caused erosion of soil supporting track number 63.	Vacuum fruck driver had been used at multiple locations as needed to defineation? T-398 line, the was flead with wath water and resided in proceeding. There was positioned next to a concrete wall in Standard Avenue and asked to be on stend by pending the result of a line break on the Avenue and asked to be on stend by pending the result of a line break on the offur added the concrete wall, fullelly, the Cherunn Safety Operator did not wink he need to vacuum at this location. After achieving a line treet, the operator realized that he did need the vacuum and asked the trave to deploy the hose over the wall. At this point the vacuum tack driver failed to deploy the street in the vall. There were no ground sources available on the street side.	We had a mar miss with our 8-hr 40 ppm NOx emissions limit at F-4551 yesterday, 125. Our parmit condition states not to exceed 40 ppm and we barely avoided an excess, Tife V deviation, and environmental scorecard event	The pump was repaired at a outside repair shop. During the repair a new shaft was manufactured with (critical dimensions taken from the original shaft) however the impeter was not correctly located / positioned on the shaft white using a vertical stacking nethod and (the aversative interfaces of twas not recognized by UNICO during assembly). The charance should have been .030 and was assembled at approximately .5675. Subsequently during field (nshallation the impeter this he case.
NL-Business Process	Operational Process/Procedures	<u>เก่นระห์ให้กรร</u> ร	NL-Business Process - Business Interruption	Nt-Business Process - Business Interruption	EquipmentProperty Demage	NL-Business Process - Business Interruption	NIOperational Process/Proceduras - Safety Systems	NL-Environmental -	Ацепо
	(1) CBO switches incorrect Hand switch (HS305C-A TRN FG manual SD) Please see link to complete TapRcoT Report.	(1) The officer had stated that they had been given instructions on opening and obtaing a whichigh gale, but had not nocehold a demonstration of how to open and close a gate. The officer closed the swinging gate in a manner that they believed to be the salest. The manner in which the officer closed the ship is the training the part of the salest. The manner in which the officer had been dowing the gate had led to no incidente on price had been dowing the gate had led to no incidente.	(1) Faik-ve to visually verify roof condition daily as a part of entry process, (2) Risk not identified, change of condition		(1) Soil sattlement overtime created significant strain on the barried pipe resulting in a creacked weld.	(1) Soit settlement overtime created significant strain on the barried pipe resulting in a creaked wold.	(1) Why did vacuum fuck operator dat to deploy his ground cable? He states a simply leggle, What catsised him to forget? He states that count of his normal routine by it. Why did the diversal by the states are deployed to the count of his normal routine? It. Why did the diversal base not of his normal routine? It. Why did the diversal base not of his normal routine? Other fished to recognize I refused to admit his hat he was be affected in his menner. Why didn't the driven use pause work authority to gut over his rifetion so their he could focus on the work with a cher head? He chose to proceed with the work instead. Taking the time and putting frich the ectual focus on the work with a cher head? He chose to proceed with the work instead. Taking the time and putting frich the ectual focus on the work with a cher head? Why did the versum truck operator fall to deploy his ground cable? A ground source was not readly available where the funck was spicked. Why wasn't a ground sources are needed have readly available where yet of the source? He was saked to point to secure a good ground source? He was saked to preced why gift in case? and was told vaccum may not even be needed. Why didn't he set use and putting forth the effort to do so was defermed unnecessary by the driver in hopes that he wackum mould rol be needed.	(1) Alam point was est too far below the actual finit to affow operations to optimize out. Ilectures the AIOX elarm point was set so far below the actual limit, operations became meaningless accustomed to ignoring the alarm and it became meaningless since we were still below the real limit.	and (the excessive invarience \$1 was not recognized by UNCO during a seembly). The Elerations should have been .030 and was assembled at approximately .5525. Subsequently during field installation the impetiter hill the case Why did "above" happen? A deficiency in quality / impetite to be incorrectly sea land was not recognized until the pump was installed in the field.

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	31002	30991	30871	30859	30833	30817	30774	30771	30759
Richimons, Zovzotz	Richmond, CA - Refinery	Richmond CA - Retinery	Richmond, CA - Refinery	Richmond. CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA . Refinery	Richmond, CA. Refinery	Richmond, CA - Refinery
2/8/2012	1/23/2012 12:00:00 AM	2/2/2012 8:00:00 AM	1/25/2012 12:00:00 AM	2/2/2012 1:30:00 PM	2/2/2012 12:00:00 AM	2/1/2012 12:00:00 PM	2/1/2012 12:00:00 AM	2/1/2012 12:00:00 AM	2/1/2012 11.05:00 AM
	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
	5	Loss	Near	Near Loss	New Loss	Near Loss	C055	Hear Loss	Near Loss
At approximately 0925, 8 Feb 2012, PPS Officer was attempting to still Gate 121 with the with the What Bus, as she badged out the gate, it badged out the gate, it leave the refrency side of the gate, a tage pice of constuction equipment accidently the constitution of the constitution of the gate, and the gate is begin to dose. The officer cit do a see the gate classing until it was too late and the right front fancer strock the gate and the right protection of the gate and part and gate gate and gate gate gate gate gate gate gate gate	Wealher delays on ANS ships lead to crude cuts.	Observed Oil on the roof of T-1504	heat damage of microwave surge protector	V-735 Steam safety iffied.	Employee expellencing severe side and back palls., Called CFP and the palls., Called CFP and the EMT's and vaed in a limit per experience of the employee to clinic for further evaluation. EE was released by the EE was released by the personal physician. All notifications to be seen by personal physician. All notifications made as required.	Green Card, Crumbling stantion ever flowmeter. Location: FCC NW of C150A & E E162B	PH Probe ordered on PO#0010113271 was signed for but could not be located	Wrong oil put in P-737 pump bearings.	Contractor personnel H2S
At approximately 0825, 6 Feb 2012, PPS Officer was exit ing Gate 121 from the RLW to the refinery with the Wharf Bue, as she bedged out the gate, it opened, but on the refinery side of the gate, a large place of construction equipment accidently draw over the "Loop Detector" on the authorited aids of the gate inc. causing the gate to prematurely begin to close. The officer did not see the gate down until the gate to prematurely begin to close. The officer did not see the gate down until the gate to the gate down the gate and bent the bottom portion of the gate and put a slight dent in the tender of	The wealther in the Alaska region, caused the ANS crude ship delivariate to the Rachmond Refinery to be delived *7 days. The prish had contingency room to accomode a sone wealther delays. However, all this same time, issues with 1-3100 look 110NIB of ANS trenstory our of use. The combined effect of these two exents led to the need to out crude.		In Cracking Division Office, found microwave surge protector that had been overheated. Probably overheated from being neer toaster, Cannot delermine when incident heppened. Area has recently been remodeled	V-735 steam safely IX-7311 Madd.	Employee experiencing severe side and back pain,Called CFD and the EMT's arrived in allmaly manner and subsequently trenported the employee to climic for further evaluation. EE was released by the climic for non-coupallonal illness to be seen by personal physician. All nostications made as required.	Green Card. Crumbling stention over flowmeter 54FT150 in FCC Northwest of C-150A, also 54FT160 Eastside of E-162B.	The PH Probe was seletivered on I/19/12 via FEDEX and sloped by the storehouse, however, the package was not necessed in the SAP system. When the field called about it, ill could not be located. Based on information on the shipping label, the storehouse checked the wharf eres and the ISE shop, but the package could not be located.	Ope noticed eil in P-737 pump end besting rasy be wrong.	A contract EE and city of Richmond inspector were completing an inspection of C-1910 in the RLOP. The purpose of the inspection was to cose out an open city of Richmond permit which had been procured to extinctize the replacement of C-1910. White escending the column the contract EE's personal Y2S monitor, so the contract extending the replacement of C-1910. White escending the contract feliated to immediately tense the area. Additionally, the ofly inspector was not carrying this personal Y2S monitor.
	Business Process	Environmentat	NL- EquipmentProperty Demage - Equipment Demage	NL-Operational Process/Procedures - Sefety Systems	NL-hayyfilmess -	NL-Lassans Learned	Business Process	NL-Lessons Learned	NL-Injury/liness - Contractor Injury
(1) Construction Craze on the Refinery Side of Gase 121 teading from RLW backed over the desting "Loop Detector justs as the Whart Bus was "badjing out to leave the RLW. This whospeace action caused the 121 Cattle to premarker)	(1) Weather > Uncontrollable.	(1) There was no clear guideline with regards to the maximum flow rates of stops to T1504		(1) V-735 pressure exceeded IX-7311 selpcint.				(1) wrong oil in trico clier	sounder? The alarm only sounded briefly and the oor initially sensed was no longer delectable was shell they along the danger was thought to have diminished (2). Why didn't contractor leave event though the alarm only sounded briefly? Fall obligated to complete task as many were waiting for his task to be completed. (3). Why fin light of training didn't the contractor evenuate? Pest experiences and prior to the use of personal elarms, i.e. working in oil fields in Bekessfield 128 was commonly smalled at low levels and this silvation seemed to be the same, based on past experience with H28 believed there was no delarger.

ispecific service order (SQ) applied against a shutdown project woo not accrued. Vendro's associated with this category bit under a rothery wide SQ that is assigned to a genterol menagement cost center. Because no SQ was assigned to the project, it would be difficult to identify a naed for an accrual as there is no remaining commitment enount to inclusia a potential liability. (2) Spind associated with a process, but the first spand exceeded the 2011 accrual process. But the first spand exceeded the 2011 accrual process. But the first spand exceeded the 2011 accrual amount. At the time of accrual proparation, it was unknown whether or not a rendor needed to increase existing service order values. For example, it an accrual captured the total communicate a need to increase their service order value, it is reasonable to assume the accrual replures or anticipated future liability. (3) Spand associated with SQ's that were escrual process. At the time of accrual preparation, it was unknown whether or not a rendor needed to increase existing service order values. The refore, if a wondor's remarking service order value, excerning the accrual preparation, it was unknown whether or not a vendor reseded to increase existing service order values. Therefore, if a wondor's remarking	·	After reviewing January 2012 costs, it was evident that around \$3MM worth of expense costs who supplied to the 4011 s hutdowns that were not accrued for during 2011. Upon the spaties of the trade in the 2012 shutdown operating expense is gript with the over intendity \$25MM, ascarding all other planned agend	Significant under accuual of	)	1442012 12,0000	Richmond,	
(1) Work bench wood surface aging and need of upgrade, (2) EE failed to consider LPSA before using work surface as a desk and scorping up paper work.	Nt-injuryiliness - Employee injury	EE received wooden splinier up under nall of ring finger on left hand white filling out operator rags on a built in work table.	EE 1st Aid . Splinter to ring finger on left hand.	Closed Loss	27/2012 1:00:00 PM Clo	Refinery	31104
(1) Work bench wood surface aging and need of upgrade, (2) EE falled to consider LPSA before using work surface as a desk and scooping up paper work.	injury/ilness	EE received wooden spilnter up under nall of ring finger on left hand white filling out operator legs on a built in work table.	EE 1st. Aid . Splinter to ring finger on left hand.	Closed Loss	<u> </u>		31104
	NL-Lossons Learned	Green Card. "Safely Suggestion Only" Thore are many BLIND INTERSECTIONS and also many intersections that become "blind his sections" daily due to cargo tank trains being stationed on both sides of drivewal/road blocking a clear visite view for both drivers white driving plent north on Percitle Red. The intersection will be on your westigde/same side as raisread tracks. Location: Heading plant north on Petrolic St.	Green Card, Many bind intersections, Location: Heading Plant North on Petrotile St.	Closed Near	1/26/2012 3:57:00 PM Cic		31100
(1) The root cause is still unknown and the invessigation confuse with multiple sollions being worked	Operational Process/Procedutes	While feeding 3100tk (covide unit used as effluent for their 4th Q Major slop / deam up tank from the unit) to the Chude until these noticed that there were instances when the FBI (Fish Bankaloural laden) numbers would creep up over time. This required EOD to stop ops. coord from feeding 3100tk on multiple occasions as to not create issues for the effluent water system. Stopping and reducing the flows created a loss profit.	3100k Toxicity and Refinery Effluent Water	Closed Loss	12/16/2011 12:00:00 AM Cic	Richmond, CA - Refinery	31025
	NL-Environmental - Spiil - 3rd Party	A 2 gallon Hudson spigyer containing potessirm permengenate solution fell off the back of a funck as it was going up Petrolie Hill Rd. 1/2 gallon of solution year spilled and detened up immedially.	Unsecured Hudson sprayer fell off back of iruck.	Closed Loss	2/6/2012 12:30:00 PM Cic	Richmond, CA - Refinery	31022
	NL-Lessons Learned	Crene and crew working at T-679-fifting barrels to top of tank. After litting 10 plus emply barrels with the approved barrel clamp, the barrel clamp lost a barrel. The barrel fell to the ground. No one was in the area under the lift. No one was injured.	T-679-lifting barrels to top of tank. Barrel clemp lost barrel, barrel fell to ground.	Closed Near	2/6/2012 12:45:00 PM Cic	Richmond, CA - Refinery	31015
(1) Construction Crane on the Refinery Side of Gale 121 leading from RLV backed over the closing "Loop Detector" just as the Whate flus was "backed to leave the RLV. This unexpected adden caused the 121 Gate to prematurely close and the Whatef Bus to strike the closing gate. What Bus defined stop in time to world on MVC.	NL. BequipmentProperty Damage - Equipment Damage - Equipment	Al approximatoly 0825, 6 Feb 2012, PPS Officer was axil ing Gate 121 from the RL/Vto the refinery with the Wharf Bus, as she badged out the gate, it opened, but on the refinery ade of the gate, a large place of construction equipment exclaimly drove over the "cop Detector on the outbound side of the gate, causing the gate to prematurely begin to close. The efficer did not see the gate construction of the gate and bent the bettem portion of the gate and part the bettem portion of the gate and part as sight dont in the foreign of the gate and bent the Both was seen and the Wharf bus. Both the Gate and the Wharf bus are still operationel, the dameg to both was coannile.	At approximately 0825, 6 Feb 2012, PPS Officer was attempting to exit Gate 121 with the Wharf Bus, as site badged out the gate, it opened, but of the other refinery side of the gate, a large pice of consuction equipment accidently protector on the outbound side of the gare, causing the gate to begin to close. The officer did not see the gate closing until it was too sale and the right front bent line bottom portion of the gate and put a slight deri in the bettom portion of the gate and put a slight deri in the see and put a slight deri in the second of the Wharf bus.	Closed	2-8/2012 8-25-00 Cic	Richmond, CA.	31013
close and the Wharf Bus to strike the closing gate, Wharf Bus did not stop in time to avoid an MVC.	EquipmentProperty Damage	the Wharf bus. Both the Gota and the Wharf bus are still operational, the damage to both was cosmetic.	dent in the fonder of the Wharf bus.	Closed Loss	AM Cic	31013 Retinery	31013

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	31389	31389	31309	31299
	Richmond, CA - Richmond,	Richmond, CA - Richmond, Refinery	Richmond, CA. 31389 Refinery	Richmond, Rehmeny
	, 12/13/2011 12/00:00	12/13/2011 12:00:00	. 12/13/2011 12:08:00	2/10/2012 6:48:00
	Closed	Cosed	Closed	Ciosad
	Negar Loss	Near	Near	Lossa
	Level not calibrated, noscinos processos, posential loss of grawing down tank below low limit unknowing, cavifaling pumps and losing fresh acid feed to the Alky; Tha id to discovery or potential loss of being over-charged for sufficient city fresh conditions of control chevicen does on General Chevicen does does does does does does  The Chevicen does does does does does does does does	Level not calibrated.	In 1821 Fresh Acid to Ally Level not calibrated; reasting Incorrectly, reasting Incorrectly, Potential loss of drawing down tank below low final unknowingly, cawfisting pumps and besign fresh acid feed to the Alky; This led to discovery of potential loss of being over-change for sufficial country of the suicason Chewron does no General Chewrich loss on General Research loss on Incorrect flow meters.	K-3 Air Compressors main breaker 12-300 bipped due to a phase of therenkal
	The T-1231 level indicator was replaced right before startup following the 4O10 Major Shukcown. The dr indicator was not cellbrated and used a specific gravity of 1. Sulfairc self has a specific gravity of 1. Sulfairc self has a specific gravity of 1.84, so we had about half the adol in the fairst as the level indicatior showed. If we had were needed more man our average daily use of sold, we could have either drawn down the lank below the low in fair and caused pump demage or we could have run out of acid if there were a process upset and needed more. The mass balance done by PED to discover the incorrects positioned it. In the tank all to the observery PED to discover that were used to yaid the General Chemical's bills for acid used flow mores that did not selfect what we were actually billed on our part and the process and the self have bit a discoverned that were used to the whole have the discoverned that were the control of the discoverned that were used to the discoverned that were used to be action to the control of the discoverned that were the self that acid for the self that the discoverned that were used to the discoverned that were used to the discoverned that were used to be actionable to the discoverned that were used to be actionable to the discoverned that were used to be actionable to the discoverned that were used to be actionable to the discoverned that were used to the discoverned to the discoverned that were used to the discoverned that the d	The T-1231 level indicator was replaced right before startup following the 4O10 Major Shutcown. The dP indicator was not calibrated and used a specific gravity of 1. Sultaino acid has a specific gravity of 1.84, so we had about half the acid in the later as the level indicator showed. If we had were needed more than our average daily use of scid, we could have either drawn down the tank below the tow kind and caused gramp deneage or we could have un not of acid if there were a process upset and needed more. The mass balance done by PEO to discover the incorrectly calibrated ut in the tank ted to the discovery that the califations that work used to validate General Chomical's bits for acid used flow mealers that did not leafled what we were actually billed on open and of the scid flow, but we are mostly billed on spent acid flow. These errors could have hid a discrepancy between our meters and their males, causing Chewron to over-pay for suithite acid.	The T-1821 level indicator was replaced right before startup following the 4Q10 Major Shutdown. The dP indicator was not calibrated and used a specific gravity of 1 Sultaince acid has a specific gravity of 1.84, so we had about half he add in the hard sat his heat indicates showed if we had about half had not one add and a start and a was a specific gravity of 1.84, so we had about half had not one set gravity of 1.84, so we had about half had not needed more than our average daily use of sold, we could have either dewn down the tank below the tow in 11 and caused grapping damage or we could have an out of ecid if there were a process upset and needed incre. The mass belance done by PED to discover the incorrectly cellbraded to 1 in the lank lad to the discovery that the calculations that was used to validate General Chemical's bits for acid used flow makes that did not hard what we were actually billed on openit acid flow. These across could have hid a discrepancy beliveen our meters and their makers, causing Chewron to overlow to see the makers.	A 105/45 hts., on 2/10/12 K-3 Air Compressor's main breaker tipped due to a phase differential cauding K-3 to shut down tellas inspector show's demoge in the breaker erea. The breaker was teolated and is being inspected at this time.
	NL-Operational Process/Procedures - Plent Run Ou/Slow Down	NL-Quality - Incorrect	NL-Business Process	Equipment/Property
(1) Training & Procedures (Communications and Leasons Learnes) P-1651 A kinor Shipping Dalay, Outside vendor refused shipment of pump due to missing documents. Common practice to send only one set of documents with shipment, (2) SOS: Training & Procedures: - Equipment aritying at Taily Room to be shipped out is not	·			(1) Incident description At 06:48 has on 2/10/12 K-3 Air Compressor's main breaker tripped due to a pitase differentiel causting K-30 so hut down. Infilial inspection forward damage to switchgear shove the broaker. The covers were removed and the burs was inspected. The inspection showed that the 12k voil but suffered a Phase to Phase fault demapting the 2k voil but suffered a Phase to Phase fault demapting the 2k voil but suffered a Phase to Phase 3. Why did 1 happen? The insulating melicial separating the 12k voil but suffered a Phase to Phase 3. Why did 1 happen? The insulating melicial separating the 12k but bots down decidically, causing the vitting to Index between the phases, 3. Why did 2 happen? The space healors were lost, slowing moisting to build up on the insulation materia. Which caused the material to lose it abilities delegated-faulty over time 4. Why did 3 happen? The space healors were lost, showing moisting they were werting on a routine duties to verify operation Roct Cause There is not a routine duties to verify operation Roct Cause There is not a routine duty to verify the space healors are working on the 12k skirtchges?

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	31558	31552	31528	31627	31507	31438	31392	31392
	Richmond, CA - Refinery	Richmend, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmend, CA - Refinery	Richmond, CA - Refinery	Richmond, CA- Refinary	Richmond, CA - Refinery
	Z/14/2012 10:00:00 AM	2/15/2012 7:30:C0 AM	2/14/2012 10:00:00 AM	2/14/2012 3/03:00	2/14/2012 8:00:90 AM	2/14/2012 6:00:00 AM	2/11/2012 12:00:00 AM	2/11/2012 12:00:00 AM
•	Closed	Closed	Closed	CI 0 88 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Closed	Clased	Closed	Closed
	Near Loss	Near Loss	Near Loss	LOS#	Near	L088	Near Loss	Near
	Leaking sample contener of hydrocarbon decovered in trunk of vehicle	Observed gap gauge pote sleeve could have caused an NOV if not corrected in 8 hours	Green Card, Silp on the algae growth, Location: S. Isomax	Error in cell template affected May 2012 H2 Poduction Values in SOLCHEV	Flare totalizer tripped due to O&R and South Isomax plant upsets	H2 flow was started on the 167 line, displaced Equid to compressors at Isomax causing a S/D	Missing MSOS and RMA	Missing MSDS and RMA
	A leaking 8-oz gleass sample jer containing unidentifiable hydrocarbon was discovered in the knock of a wholde whan chevron EE was investigating strong corn in passenger compartment. The webbite was parked in the parking lot outside the 214 Meh offices. The gleas container was discovered in a small plastic buckel located the funnt of the car, and not in the sample center provided specifically for transporting (not storing) sample conteiners. The near tost is defined as: 1, Personnel apposites for cunicoven hydrocarbon eliter by spill or inhabition if container became further compromised. 2. Refinery instruction Hazard Communication (R10131) violation and opositio five free passed associated with mishandling chemical substance with no identifiable tabeling.		Green Card. Silp on the signs growth on the northside of the coad from Hydrogen St. to the S. Itemax Confrol House, Locatien: S. Isomax - Hydrogen SVEntrance to Control House	The Hydroger Plant Numbers for May 2012 in SQLCHEV were significantly leave than the either months, and there was no major estudiewn planned for May 2012 Nihy was the May 2012 HZ value flower? Because the SQLCHEV Planfoader had a lower 122 value. Why did the SQLCHEV Planfoader had a lower 122 value is stock balance transfer implate had a lower value. Why did the Stock balance transfer implate had so lower value? The cause the sell on the Utilization tabe of the stock balance transfer implate had on enry in it. Why did the odil in the stock balance transfer implate had on enry in it. Why did the coll in the stock balance transfer implate had one for in 12 decause the previous years is empirate that was copied over for 2012 had the call changed for a specific purpose, and there was no cought during review? There was no process for reconciling the stock balance and cried the part of the stock balance was the correct. Why were the stock balance which the actual stock balance was contract. Why were the stock balance and tradequate communication of expectations regarding procedures or	Flare totelizer tripped due to D&R and South Isomax plant upsets (reference L1 31436)	H2 excess valve was tound closed on 5Rhen, moves were made on 4 Rhen to establish flow down the 167 line from 5 Rhen. Lauid in the filled up knockou! pots at Isomax ceursing a High lavel S/D of line 6 compressors. Feed rales were cut at TKN, TKC, LNC, 4 Rhen, 5Rhen.	INITIAL DESCRIPTION: SEE LINK ATTACHED IN INVESTIGATION FOR COMPLETE TOP REPORT. Hot shipment or pump and geat box sent to vendor. All information about material not sent to meaning at son preparing the material for shipment. Return to Vendor Authorization number and MSDS sillathod to cate at iteliancy. Vendor fathoda obligment because aforementioned paperwork was missing when detworned.	INITIAL DESCRIPTION: SEE LINK ATTACHED IN INVESTIGATION FOR COMPLETE TOP REPORT. Hot shipment of pump and gear box sent to vender. All information about material not sent to internal shop preparing the material to shipment. Felum to Vender Authorization number and MSDS attached to crate at refinery. Vender refused shipment because afforementioned paperwork was milisting when delivered.
	NtLessons Learned	NL-Regulatory Compiliance - Non Compiliance - Air	NL-injuryilliness - Contractor Injury	AL-Business Process	NL-Business Fracess - Business Process	Cperational Process/Procedures	N. Business Process	NL-Transportation -
(1) 5 Why for P-891 Gearbox O-ring Issue: Shop Supervisor used SWA/ PWA to take the pump out of service for suspicion of incorrect Or ring installed in the gearbox. Why did line above happen? 1. The shop mechanic talked to the supervisor ratine observing the assembly of another similar gearbox in the stop and he rolled the O' ring installed was incorrect and believed that he had restaled the same size 0-ring in the P-891 gearbox. Why did the above happen? 2. The OEM drawing does not provide the actual size of O' ring that	(1) Richmond PED team does not have a Procedure/JLA for propper handing and teansportation of sample maiorial. (2) Though it's unwritten, it is standard by PE to deliver jeb samples directly to the lab upon receipt from the filed. The engineer choses to delive yeb defivery due to other obligation, this resulted in the sample being left in the car.	(1) The design of the gauge pole sleeve assembly has very close folerance and would have up on the gauge pole. The design of the gauge pole sleeve assembly has very close. The cloid that a model thang up on the gauge pole, (2) Gauge pole sleeve design does not takes into account the uneven section of the gauge pole.				(1) Employee did not recognize risk of re-establishing flow on the H2 line (2) Procedure didn't cover this scenario., (3) No alarm to trigger ops of increased risk of liquid slugs to SISO.	(1) Training & Procedures (Communications and Lessons Learned): P 1651A. Minor Shipping Delay. Outside vendor relused shipment of pump due to missing documents. Common practice to send only one set of documents with shipment, (2) SOS: Training & Procedures: Equipment arriving at Telly Room to be shipped out is not always ready for shipment, as per FIQ-304 requirements. Shipping Order is missing or not completed. Tegs are missing making verification of cleaned and arrived and arrived and arrived the composition. Equipment in crases are sealed and Taily Room gersomet has to spen the crate to be able to verify proper sequenced to shipping and that It is clean, sniffed, legged, etc and proper documentation.	Inways ready for shipment, as per RI-304 requiremente. Shipping Order is missing or not completed. Tags are missing mating verification of cleaned and strated explanent impossible. Equipment in crates are sealed and Tally Room personnel has to open the crate to be able to verify proper equipment provides shipping and that it is clean, sniffed, laggest, etc and proper documentation.

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	31655	31847	3162B	31609
	Richmond CA - Refinery	Richmond CA - Refinery	Richmond CA -	Richmond, CA - Refinery
### ##################################	2/16/2017 12:20:00 PM	2/15/2012 1:00:00 PM	2/6/2011 17:00:00	\$231720\$2 9:00:00 AM
	Closed	Closed	Closed	Closed
	Loss	Near		Los
	Direct burial phone line	Grean Card, Evacuation meltod and done correctly, Location: Alky	Exira work submitted by CUI via a mail and accepted not executed	Suspected incorred O'ring was used in the P-891 year box during assembly as the etop.
	While accessing a trench for the Homeland security project. A direct burial places line was demapped. The crew was aware of the proxitrity of the cable. Digging was stowngrased from a backine to a shoval and pick. A pick was used due to the rocky nature of the soil. As the laborer cleared the loose rock with a showsh to make of the sovered the invancible with a showsh to make of the sovered the invancible supervisor was ready for the electricians to conduct their part. In the mean time 'the supervisor notified the proper personnel.	Green Card. Plank was evacuated due to an upset of some scat. Craw evacuated to settly zone outside of unit and the Contract Expendeur did a head count to assure his crew was all accounted for. Another contractor was in head count to state and never head the evacuation alarm. No one from ops ever came out to confirm against aginh street in that everyone was accounted for. Also, there were no updates given, so the crew had no idea what was going on. All clear signed was given about 2.5 first later. Ops at did not make any effort to contact the confractor who was in the notsy erea to get him to safely. These is supposed to be a special method to contact people in very notsy areas in the event of an evacuation. Location: RLOP		Suspected incorrect O'ring was used in the P-891 gear box during assembly as the shop.
	Equipment/Property Demege	NL-Lassons Learned	NI-Operational Processures Pland Run Ou/Slow	Quality
(1) "FIVE WHY" One Page Report Indident Number; 31667 Business Unit; Downstream Location; RT D Facility Name; Rich Business Unit; Downstream Location; RT D Facility Name; Rich Ref Indident (left-2/16/2012 Type of Process: Mike Type of Expenses: Mike Type of Expenses: Mike Type of Expenses: Mike Type of Expenses: Mike Klein Shawn Golden Denile Larey Indident Docerplien: What: Location or where in the process; Calcular per problem Statement (what is the key Issue that needs to be addressed?); Workers were above 6: Of ground working not led of: FIVE VHYS 1, 1 Why did "above happen?" Verification Job was a fill in schoduled later in month Neithing to fee of to at time of job. 2. Why did "Imppen?" Plenned jeb for that afternoon foil through. Trying to stay busy. 3. Why did "2" happen? Plenned jeb for that afternoon feel through. Trying to stay busy. 3. Why did "2" happen? Plenned jeb for that afternoon field through. Trying to stay busy. 3. Why did "2" happen? Barbers in fine fish or fak. 4. Why did "3" happen? Yornworkers have gotten used to working without "3" happen? Tornworkers have gotten used to working without "3" happen? Tornworkers have gotten used to working without "3" happen? Tornworkers have gotten used to working without "3" happen? Tornworkers have gotten used to working without "3" happen?	(1) The method of use for the hand lool chosen was indeequals.	(1) Why was contractor not notified of the plant evacuation? Loss of cooling water in RLOP caused avac. Ouside operators swept the plant quickly white responding to the incident	(1) incident Number LI# 31628 Business Unit Phydio Location SISCO/A2B-Train Facility Name Richmond Incident data 26/2011 Type of Process: CUI Piping Replacement Type of Equipment Bosies System Blow down Team Nameners: Indient Description: What Massad CUI piping replacement through the County of the Part of Process; Phydroxis ScO/12B-Train Bosie System When; 1711 H2B-Train Train TA How, told not request Scope injurier to verify final scope that was entered into the TAW system. Problem Statement What is the two this program of the TAW system. Problem Statement What is the two this present of the TAW system. Problem Statement What is the two this present of the TAW system. Problem Statement What is the two through the TAW system. Problem Statement What is the two through the TAW system. Problem Statement What is the two through the TAW system. Problem Statement What is the two through the TAW system. Problem Statement What is the World of the TAW system. Problem Statement What is the World of the TAW system that t	was installed at this location and the mechanic assumed the O-ring in the sit he received and subsequently used was the correct one. Why did the above happent? I because the O' ring fit in the greeve so the mechanic assumed that it would provide the correct amount of O-ring compression and gasket crush expected for the genthox lubrication port and case flange.

	31705	31875	31667
	Richmond, CA .	Richmend, CA - Refinery	Richmond, CA - Refinery
A Third Committee of the Committee of th	Z/16/Z012 5/00/2012	2/16/2012 4:00:00 PM	2/16/2012 12:00:00 AM
	Closed	Closed	Closed
	Negr	Loss	L Ne
	HW Portabla Tank Maleriel Transfer - Incorrect Tank	18 plant Startup vented to	Parking Lol across from
Late Approval of Refinery Instructions RI 802 (Casually Loss) and 806 (Credit		During 18 plant startup ups was venting V1810 to reket while depressuring column prior to feed in and opened merual vent valve quickly everwhelming FGR and tripping FGC fare totalizer, no visiable faring occurred	Bigge crans and crow under the supervision of Chevron employees were using a crane to lift traffer boxes off the traffers using a crane and rigging. The riggers were up on the boxes connecting and disconnecting the riggering without fell protection.
	NI.essons Learned	Operational Process/Procedures	NI-Operational Process/Procedures Safety Systems
(1) Why #1 — Why were the RI's not signed and approved prior to the compliance date? A notification system exists for RIs had need to be updated Expectations were unclear around the deadline—the RI had to be updated and available on the web' to establish completioness. There was insufficient understanding of lead time to completio, paralysis a very busy month for Finence (closing books, accidates—this is a higher priority). Autifile and competing proforelise—almoyaln these were predictable. There was communication in early Decamber reparting the need to complete in Lanuary Email updates were sont in mid January and Jan 25th, Jan 27th and John wither communication finally got to action. Why # 2 - insufficient exprecatation of char priorities or not high enough profortly or lack of commitment to get them done on time? The	(c) Root cause Identified as inadisquate communication during job preparation and performence by the contract laborar. The main problem is that material was pulled from his worting lank. Why did this happen? Because the contract laborar supporting the spot rigger bottom fitting connection to a tank other than the one intended by the incorrect lank. Why did that happen? Because these was the hot tanks left to be fransferred on the job – one half emploid from the top and one completely empiled from the bottom. The become with the better had been the part one completely empiled from the bottom. The become for completely empiled from the bottom. The become with the best on material transfer and the work exhibits which had been ongoing for several days. The tank intended for complete fransfer had been fitted with bottom draw connection on the preceding evening in readings stort the next connection on the preceding evening in readings stort the next connection on the preceding evening in readings stort the next connection on the preceding evening in readings stort the next work shift, but he did not know with. But had received instruction in this morning meeting to proceed with a bottom fraw realeds it reasons the former with a fortier or the readio later comments. Why did the proceed that way? Because the examination. Why did that happen? Because the examination of the preceding specifically referenced during the examination, why did that happen? Because the sexumination of the post of the first state of the fi	(1) Why did FCC flare flow totalizer risp during 18 plant startup? During startup operations readed to clapressure C-1820 CH Per 1819-NIP-2001 which has this caudion: As alean its Increased to E-1827, C-1820 pressure will increase, High pressure in C-1820 will reduce or stop flow from C-1810 due to loss or differential pressure. A high tent in C-1820 will reduce or stop flow from C-1810 will occur. Excessive vening of V-1820 can cause a plume and an environmental impact. Opening the manual vent caused excess vening and a flare totalizor (rip	lying off in their trade. Fairly common practice outside of our facility. 5. Why did "I happen? Should have taken the lime to acquire a man lift. 6. Why did "Shappen? Workers did not innk it was a high risk; bb and drd not take the time to get needed salely equipment. 7. Why did "Shappen? 8. Why did "Nappen? 8. Why did "Thappen? ROOT CAUSE: What was the Root Cause of your incident? Workers did not take the lime to get needed safely equipment. LPS and did not take the lime to get needed safely equipment. LPS Factor: FIVE WHY" One Page Report Incident. PS Factor: FIVE WHY" One Page Report Incident Cause of Process/filling Type of Equipment/Sea van Team Members: Mike Nein Shawm Goden Donnis Lacy Indiant Description: What: Losding Sea-Van containers for transport Where (location or where in the processe); Cereleted perking lot

https://impacterm.chevron.com/IMPACT/ANYWHERE/Reports/exports/scenario_159134_f8a5390b-1e90-4874-b012-4d17412a3a40.htm 8/9/2012

	T	I			<del></del>
	31816	31749	31748	31708	31708
	Richmond, CA - Refinery		Richmond. CA ·	Richmond,	Rehmond, Refinery
	2/17/2012 3:35.00 PM		2/18/2012 0:32:00	2/12012 112:06:00	2/1/2012 12:00:00 AM
	Closed	Closed	Closed	Clesad	Closed
	Near Loss	Near	C Negar		Near Loss
	Onling Equipment fitting failure leaked hydraulic fluid to the ground.	P-1453 shutdown on V- 1453 low level	K-1400 sour oil trap stuck open and gassed out to reliel, tripping FCC/ALKY totalyzers.	Lalis Approval of Refinery Instructions RI 802 (Casualty Loss) and 806 (Casualty Loss) and summing Items to Storehouse)	Laie Approval of Refinery Instructions RI 602 (Casuality Loss) and 806 (Clasuality Loss) and solid for Returning Items to Storehouse)
I was initially asked to assist in setting up expedited freight for the V-130 Yesses from Sand Springs. (OK to the Richmond Refinery, I contacted CEVA (preferred carely to coordinate that activery, and they quoted a targe of prices to cover the permiots & detivery. This was a High Visibility Project being	At approximately 3:35 pm. Contractor Drill Rig had a hydraulic hose filling give way while drilling onsite. No one was injured or exposed. A small amount hydraulic fluid leaked through the equipment on to the ground.	INITIAL DESCRIPTION: SEE LINK ATTACHED IN INVESTIGATION FOR COMPLETE TOP REPORT, P. 1453 (RLOP wash water pump) shut down on V-1453 fow lavel.	K-1400 sour oil liap LC-008 sluck open and gassed out to refet. This caused a try of the FCC and ALKY totalyzers.	Lete Approval of Referey Instructions Rt 802 (Casuelly Loss) and 806 (Credit for Returning Items to Storehouse). The Rts were not completed for revision on line and were out of data. The Referey instructions were circulated for revision on the working of the experison date of Junuary 31st. A positional mort system exists for Rts that need to be updated. Expectations were unclear around the deadline—the Rt Ind to be updated. Expectations were unclear around the deadline—the Rt Ind to be updated and waishable on the web' to establish completeness. These was inscribed in understanding of lead illme to complete, January is a very best month for Finance (closing books, acceptars—this is a righer and there was an opportunity to about the ordision earlier. Thore was communication in early December regarding the need to complete in January Email updates were sent in mid-anuary and Junuary.	for Returning Items to Storehouse). The Ris were not completed for revision on time and were out of clale. The Refiney Instructions were circulated for review in November and December and did not get completed in a finely manner where of the expiration date of January 31st. A notification system exists for Ris that need to be updated. Expectations were unclear around the deadding-the Ris had to be updated systems of the web' to establish completeness. There was insufficient understanding of lead time to complete, January is a vury busy months for Finance (octaing books, a cocirule — this is a higher pidointy). Attliphe and competing priorities — although these were predictable and there was an opportunity to start the revision earlier. There was communication in early December (regarding the need to complete in January, Email updates were sent in mid-danuary and Jan 25th, and 27th and 30th. Further communication finely got to closure in early Fabruary.
	NL-Environmental - Spill - 3rd Party	NI-Operational Process/Procedures - Safety Systems	NL-Regulatory Compliance - Permit Exceedance	NL-Business Frocess	NL-Regulatory Compilance - Non Compilance - Company Policy
		(1) SOS: Malnonance & Inspeciana: Foully Indication on Shipped Wash Water 64F1353. (2) SOS:Training & Procedures: Interviewees did not recell and info not on turmovers. Unable to determine exact lime when valve was blocked in., (3) - Siglobar Issue, Mainforence & Inspecians (Machenical Integrity): Stipped Water Block Valve in remote, hard to reach localiton. Possible crack on pump P-1453. Faulty PRO's on pump.	(1) K-400 scur ol tep) LCV sluck open, "FWE WhY?" One Prigs Report incledent Number 31748 Business Unit Hydro Location RLOP Facilly Name HVC incident date 2-18-2012 Type of Process: HZ Type of Equipment: Seal oil trap: Team Members: Incident Description: What K-1401 sour-sets oil LCV valve hung open. Causing HZ to gas out to relief. 1713 tripped the FCC and Alky Uniterset. Whese Glocation or where In the process; K-1400 When; Z-18-2012 00:30 How Sour oil trap. LC study open. Process 15-18-2012 00:30 How Sour oil trap. LC study open. Process 15-18-18-19-19 (Archard to the addressed?): Why did we go to flar? FVE WHY'S 1. Why did "above" happen? Verification Excessive HZ trom K-1400 set oil trap. LC Wy did "1" happen? Centrol valve study spen and the study of did-10-19-19-19. The process fastle and calcidate strent, ROOT CAUSE: What was the classes fastle and calcidate strent, ROOT CAUSE: What was the Root Cause of your Incident? LCV suck open. LPS Factor:	(1) Why #1 – Why were the RIs not signed and approved prior to the compliance data? A notification system exists for Ris that need to be updated. Expectations were unclear around the deadline—the RI nad to be updated and available on the web' to establish completeness. There was instificient understanding of lead three to complete. Lanuary is a viery busy month for Finance (closing books, excitation, this is a higher pidotity). Multiple and comparing priorities—although these were predictable, Thate was communication in early December regarding the need to complete in January. Email updates were sentit mid-autury and Jan 26th, Jan 27th and 20th further communication from 15th, Jan 27th and 20th further communication for the properties of other profities or not high enough priority or lack of commitment to get them done on fine? The RI's were seldom used and had not been updated in a tong firms. In the past RI's not updated on hims had been indeated, Why #3. — has this been indeated on hims had been indeated. Why #4. — no consequences or been obserted. Culture— It has been reinforced and become the obserted Culture— It has been reinforced and become the obserted for further standing around the Roles and Responsibilities for RI updates, Why #5. — RIL Trans tack of importance? RILT— of on provides sufficient Vast of the RI to competition of the RI par the data-fline, RI I member mysponsible for the RI needs to commit enough time and importance on the timely to what and approval of the RI.	RI's were seldom used and had not been updated in a long time. In the past RI's not updated on kine had been blocated. Why £ 3 – has this been blocated and kine had been blocated. Why £ 3 – has this been blocated? Not consequences or loss occurred in the past. Why £ 4 – no consequences or been blocated? Culture – it has been reinforced and become the norm. Lack of expectations from RI.T/GM combhed with back of understanding around the Roles and Responsibilities for RI updates. Why £ 6 – RLT/GM, back of importance? RIT – edd not provide sufficient lead time (understanding of other priorities) and put sufficient inproferance on the completion of the RI per the deadline. RIT member responsible for the RI needs to commit arough time and importance on the timely reviews and approval of the RI.

T	T	
31837	31033	31833
Richmond CA Refinery	Richmond CA.	Richmond,
2/20/2012 12:30:00 PM	10/20/2011 12/20/2011	10/20/2011 10/20/2011
Closed	Closed	Clossed
LONG REP	Near Tops	Near .
Ullilas K3 Air Compassor tijo on Higi bioe di temperature	V-43D Transportation fo	r V-430 Transportation for
Ullillies loss of K-3 air compressor due to a High-High lub e it in-moratuu on 857306 of 3-465; on K-3's VANTAGE controller hip protection system. On 2720/12 ap 12:15 PM the Distribution Operator/DO) was notified of a K-3' Common airm" via Cogen CBO (Board Operator) Once at K-3 the OO rolload the "Fritnay Dirat fallure" airm it reset the drain airm. After further inspection the Lube oil lamp alarm was notified at the VANTAGE panel. The low promity airm seeling its >130F; on 951306. The local field 11 indicated a lower resoring of 6-7F. LOWER, After calling the Distribution Head Operator (DHO) out for assistance after a lube oil system Inspection was made, a cooling water supply flow move was made to attempt to decrease the lube oil temperature kept increasing to the point of the Shufdown protection setting of >145F, on the VANTAGE controller Q-12:30 PM. The Cogen Head Operator(CHO) merediately called South 150 for K-2600 to be put VS & FCC to start their portable A/C. K-2600 was Online in himbles to provide yard & instrument air for the yard with no major loss of Yard in Instrument Aur.	I vess firtially asked to assist in setting up expedies freight for the V-420 Vessel from Send Springs, Olk to the Richamord Refinery; contacted CEVA (preferred camier) to coordinate the delivery, and they quoted a range of prices to cover the permitted set of the permitted of	Indicated by members of the Researcy Leadership Team. After some Initial Emails & phone cells with CEVA, Crain Dillon seria was a ownell stelling that he had a lack of confidence in CEVA to sequire the required permits and do the job limely. I had not had any history with CEVA on a job of his nature, so a contented Capp Legislact as see if they could assist us in a gating the V-43o. Shipped hare by the 10/17/1, firm delivery dale. I had a good history working with Capp on other large, expected a shipments. Capp responded quickly & contidently that may handle this job, After several Conterned Calls, Citally & Mike Fitzgerstell proferred to go with Capp Legislatio, and us to limit cap on other large, expected a shipments. Capp reached place I notified CeTA, (After Hamilton) had two were no longer requiring their cancer & the response, better history of these large jobs. & a belief quoted price. I notified CETA, (After Hamilton) had two were no longer requiring their arrives as a fight of the proper of the situation, and year to be coursely we required. We conflued to receive delity updates from Capp on permitting & truck senitability. Their Rep was on top of this situation, and year to be Stuffens. For an advantage of the situation of the delity of the senitability. Their Rep was on top of this situation, and year the Business Famines confidence in their ability to particular the unit taring another work stoppage, possibly conting \$500K in LPO, each along. The V-30 was picked up on schedules on 10/4/11, and we recived daily ernal reports on the delivery shalus of the vessel bas it tarveled to Richmond in 14 days. There were exceptions as to when the vessel could travel in cardian states due to the \$126 & weight of the bad, CApp was in contact with the effect, and teep is the he loop the antifer route. We set that had we not switched from CEVA to Capp wind GeVA. They was also yeared our as the proper of the large interference was the single of the post of the card. They also provided cast was ever \$100 test than t
NL-Business Process - Business Interruption	NL-Transportation -	NL-Business Process
(1) K.3 High Lube Oil temporature S/D protection on 95Ti305 >145F via VANTAGE controller	·	

A person with proper Government issued ID may have been allowed access to the refinery (or pickupide/ivery without clearance.  E-2301 150 steam boiler on #3 train, gauge glass failed. Had to isolate the only gauge glass on the boiler. Caffornie boiler code requires at teast one gauge
Chioride level of FCC fead spiked during the weak of Feb.13th constraints were put on FCC which forced them to reduce the total feed.
At approximately 0615 a vehice struck the Hensley Street exit gate and broke off the arm.
K-14665 Seal Oil Trap falled in the open position to relief. K-1400 was rurning rormsity. ONS2 SISO. — started invahisationding relief sources after V-1652 and V-1000 registered high invest. RLOP's relief flow inclient reSeriols surged inward for 2 seconds(0,355 to 2.8 M/MSCFD),K-1400 sour seal oil trap LC-688 stuck open and spased out, custwing a titip of the FCC and My toleisters. Openator immediately responded and blocked in 64LC988. Why did the CCC/ALKY olditzer tip? Excessive 12 from K-1400 seal oil trap overwhelm. COMMON relief insidet to FGR My was there excessive Hz towns from K-1400 seal oil trap 84LG88 fall to dose when cycling to dump liquid level, Myy did K-1400 seal oil trap 84LG88 fall to dose when cycling to dump liquid level, Myy did K-1400 seal oil trap 84LG88 fall to dose when cycling to dump liquid level, Myy did K-1400 seal oil trap 84LG88 fall to dose when from K-1400 seal oil trap 84LG88 fall to dose when from the company of the seal of trap 84LG88 fall to dose when from the company of the seal of trap 84LG88 fall to dose when from the company of the seal oil trap 84LG88 fall to dose when from the company of the seal oil trap 84LG88 fall to dose when from the company of the seal oil trap 84LG88 fall to dose when from the company of the seal oil trap 84LG88 fall to dose when from the company of the seal oil trap 84LG88 fall to dose when from the company of the seal oil trap 84LG88 fall to dose when from the company of the seal oil trap 84LG88 fall to dose when from the company of the seal oil trap 84LG88 fall to dose when from the company of the seal oil trap 84LG88 fall to dose when from the seal of trap 84LG88 fall to dose when from the seal oil trap 84LG88 fall to dose when from the seal oil trap 84LG88 fall to dose when from the seal oil trap 84LG88 fall to dose when from the seal oil trap 84LG88 fall to dose when from the seal oil trap 84LG88 fall to dose when from the seal oil trap 84LG88 fall to dose when from the seal oil trap 84LG88 fall to dose when from the seal oil trap 84LG88 f
Clift clean (eté fants where stipped to #8 whse, with adaptor fittings on bottom celeasse valve. Did not thave safety caps in place, which is a safety concern and not proper handing according to DOT regs.
Green Card. Herd la unlock door to get out of PSM Building (Gate 91)
A contractor wellking out work for another line discovered a light mist spraying from a ripple on the 16 DB line to the relief system. The 16 DB is the disself seles line the Loading Racks.
Green Card. On back of Tank T-3106, there is an electric pole hanging on hitside. Location: 885 T-3106
Green Card. A worker daylighling on lines across from EOD complex, near the water ponds, with no tile vest, Location: EOD Water Ponds
Green Card. A 2" support pipe needs to be painted under the stairs in front of K-320 so people don't walk on it or slip, trip and fall and hit the pipe.
Green Card. Overhead hot oil leak needs to be fised, because it leaks on the welkneys and if someone waks under ii, ihey can get a hot oil burn. Looslion. FCO E-102A
Grean Card. When I got a radio call to come to the job and install a vortex metor, our welloway area feeked very uncafe because a steam teak makee if hard to see the walkwey, Location: FCC E-102B
An exper was placed for Ludnizily Acquisive Richt on Feb. 2 kinotign Ange and on Feb. 10th the official had to be expedited because it was discovered that the order had not been received by the supplier. The order leading is 10 business days from the date of odder receipt by the supplier, which would place the delivery on at near Feb. 15th.

Richmond, 2/21/2012  Richmond, 2/21/2012  CA- 2::00::00  Refinery PM Closed Loss vending machine had been say.	Reinmond, 2/23/2012 CA 12:08:00 Nest A16-01 not completed by 2011 CalARP Aust finding Reinmond AM Closed Loss due date.	1/1/2012 2011 CelARP Audit finding 12:00:00 Near A11:20 not completed by AM Closed Loss due date	T-957 was file	Initial annal a Critical Programment Progr	Initial emait a formation of the work of t	Rechment 2/23/2012  Rechment 2/23/2012  Rechment 10/00:00  Refinery AM  Closed Loss are sun baked and british concentrate. Some lines to some	Monitors 0515-0522-0522- Rechmand, 2/23/2012 CA. 1000:00 Refinery AM Closed Loss less on baked and brille. Concentrate.	Refinery PM Closed Loss Idea Was rinke All was rinked to w
in and noticed a he noticed it	2011 CalARP Audil finding A16-01 not completed by due date.	Consider consolidating ventilation system information in the EOM to include chemical songers and sheller in place information and links to applicable drawings.	T-957 was filled on 2/21/12. On the evening of 2/22/12 additional bbls were moved into the lank to salisty a vessel load (68M orbitaid the Cedar Galaty) (co. 2/27/12. Due to heat of the day on 2/24/12 the meterial in T-957 exceeded of the control	initial arrait sent by requesion to Procurament in April 2011 to discuss apilina for new one-time. Requestor submits request for new constitutions are submitted and progressed to Category Management to submit one-time. Os review was submitted and progressed to Category Management. Decision, Ahared, but email cannot be found and was not applied. Buyer managing One-Time identification are with a buyer and transitions to a 3rd Buyer. New buyer goes out on vecation and transitions to a 3rd Buyer. To submitted by 3rd Buyer CS quickly pointed to sardier review and sardysed to push further, Several conversations and emails were had, but the final delemination email was not redisconvered. (272/147 z. Email sent to Category Manager who participated in review, respecting (where support, 0272/1472 z. Final determination what is understancing that the entire review had resulted in en approval. 02/24/2012 z. Updated vendor estimate requested, requested, and the prequestification request submitted, and drange code sequested from new requested.	Initial enrait sent by requestor to Procurement in April 2011 to discuss options for new one-time, Requestor was sent requestenents to submit one-time request bazzazzio 11. Requester was sent requester en-time. Sc review was studmitted and processed to Calegory Management. Decision shared, but small cannot be dound and was not applied by the managing One-Time transitions to a new job and One-Time is handed off to a different Buyer. New buyer goes out on vecation and transitions to a 3rd Buyer. 12:20/2011 - CS fishew Heritalised by 3rd Buyer. CS quickly pointed to elifer review and advised to push further. Several conversations and enraits were had, but the first clearmination oranial was and rediscavered U2C/11/2. Email sent to Collegory Manager who participated in review, requesting further support. O2C3/2012 - Final distimination was made to proceed without Category Manager occumentation with the understanding that the earlier review had resulted in an approval. O2C24/2012 - Updated vendor eatimate requested, requested, requested from new requester.	Monitore 0515-0521-0522-0523 have broken lines that attach to 65 gal drum concentrate. Some lines are sun baked and briffle.		operator operaed the gale. They drow the fork fill from the MGRU to the storage told pick by the told. Once they picked up the told told end started back into the MGRU they did not notice that the gale had partially closed. They struck the gale with the fork lift. There was no damage to the fork lift. There was more than the fork lift. There was minor damage to the gale repetic.
NL-injuryillingsy - Employee injury	NL-Business Process - Business Process	MBusingss Process	NL-Operational Process/Procedures - Safe Operating Limit (SOL) Exceeded	NL-Business Process	Husiness Process Business Interruption	NL-Operational Process/Procedures - Safety Systems	સા- Equipment/Property Darnage - Equipment Darnage	NL- Equipment/Property Damage - Equipment Damage
			(1) No guidline on maximum fil level to prevent Sefe Oil Helight exceedance due thermal expansion.					(1) Lack of fork HR expenise

	32353	32353	32339	32327	32285
Richmond.	Rehmond, CA - 22353 Refinery	Rickmond, CA -	Richmond, CA: Refinery	Richmond, CA - Refinery	Richmond,
Richmond, 2/27/2012	2/27/2012 6:40:00 PM	2/27/2012 0:40:00 PM	2/27/2012 2:30:00 PM	2/27/2012 1:00:00 PM	225/2012 11:10:00
	Clospd	Closed	Closed	Clased	Cleerd
***************************************	C0 \$1	Logs	L095	Near Loss	L c es
			<del></del>	1	
	ing psy	V-1610 psv rei	5 trip d	in Card tion: At ax, 6' r	of second in a sec
	V-1010 psv relived early causing faging	V-1610 psv reived early causing flaging	uring p	Green Card. Repair hote Location: Atrain South Isomax, 5' N of E-333	Loss of seek on P-1831A. P-1831 in shop for repair
	early		F-305 trip during pressure survey	r hote. Wth	Loss of seel on P-1831A. P-1831 in shop for repairs.
Flaring occurred At about 21:00 on 2/27/2012 both the RLOP and FCC flares due to K-1900 in RLOP surging. Sampling requirements occurred in both flares and HcEs confirmed an RQ for SDZ on the RLOP flare account deaths, the triggering the Consent Decrees and BAAQIMD reportable flaring incident criteria. During the indicant the cause of the surging in K-1900 was fraced back to the 20plant PSA, Due to at the plant fleed cuts and shufdowns read to the PSA was decreasing outsing its performance to degrade caushing lighter and	At approximately 18.38 (227/2012) Flow from the RLOP relief header overlyntemed flate gas recovery and popped the seal on the FCC flate causing visible flams, Durabbn of the event was approx 20 minutes/flate sample visible flams, Durabbn of the event was approx 20 minutes/flate sample automatically texten after 15 minutes), judicide operations and CO-6, began searching from a cause of the occurs of the event with nothing over the right, Deassure separation and the search of the PKY on HMF High pressure of the risk solated for amnodists service and the other it is solated for amnodists service when needed, With the tost of a train earlier in the day the bleed was blocked in , in the HMF this standed to cause the HMF system pressure to swing, It was running at 2550FSI, At 2500 the PSV-31 TILL 1600 lifted to milist, it is set to lift at 2751FSI, The CO side ocacled open the bleed to stabilize the system pressure. This event was Not an RQ Event as verified by HES	At approximately 18.38 (2/27/20/2) Flow from the RLOP reset header overwhereof the gas receivery and popped the seal on the FCC there coulting visible flaring. Duration of the event was approx 20 minutes/flare sample automaticably texes after 15 minutes.) quiside operations and Co-Cs, began searching for the ceuse at the crisis of the search with nothing over the sight. Outlide operations while searching, found the PSV on HHF High pressure searcation was tifting and switched PSVx. hormally one is in service and the other is toolsted for immediate service when needed, With the less of a train other is toolsted for immediate service when needed, With the less of a train other is toolsted for immediate service when needed, With the less of a train other is toolsted for minediate service when needed, With the loss of a train other is toolsted for minediate service when needed, With the loss of a train other is toolsted for minediate service when needed, With the loss of a train other is toolsted to relief, it is set to fif at 2550PSI. At 2550 the PSV-31 (IL) 600) lifted to relief, it is set to fif at 2550PSI. The CO also cracked open the bleed to stabilize the system pressure. This event was Not an RQ Event as verified by HES	A pressure survey was being conducted on the feed gas valves on F-305. When the feed gas flow went to 0 MMSCFD, the fuel gas flow controller closed due to being an ratio control.	Green Card Asphall needs to be repaired. Big hole, serious tripping hazard. Location: Atrain South Isomax, 5 North of E-333	SEE ATTACHED LINK FOR COMPLETE TOP REPORT - P-1831A, C-1831
courred 1990 in confirm the Co o incide 98A, Du easing	dimately med fla med fla med fla med fla med fla med fla fla for the peratic peratic peratic was fit would the day system system (il.1600 the fla	dimale) med fla med fla ming. Du cally lab j for the peratio r was ki r was ki the day system system system objects objects	re surve ing an i	ard Asp Atrain	ACHEE Sidelion
At about RLOP wed an I	18.38 re gas la malon cause cause re whill fing an for min the ble pressu. If find by HE	18.38 re gas : uration : ten afte cause cause cause cause cause cause cause cause cause in a whill ing an tor from the bir	as flow	hall ne South i	PLINK
of 21:00 surging RO for society of the place	(2/27/2 (2/27/2 of the p of the p r 15 mile at the c at the c as satched switch additional and the control of the switch and t	(2/27/2) recover 15 miles at the ce searce switch additional was refused was refused to switch to railed to railed to railed to railed to switch to switch sed to switch s	being o went to	eds to I	SOL CO
SOZ or 2/2 SOZ or and BA I the su forman	o12) Fi y and p y and p y and p y and p ynset o ynset o ynset o hing, fc and PS' and PS' and PS' and PS' and PS' and PS' and psystem	012) FI y and p y and p y and p y and p nutes.) nutes.) nnset o nnset o nset o S service servi	onduct	5' Nort	led.
Wilners  The RI  AGMO  AGMO  AGMO  AGMO  Cuts ar  ce to d	ow from the extended in the ex	ow from opped opped outside ou	ad on to SCFD,	hof Ed	TE 10
t bath I quirem Quirem COP fla report n K-180 nd shut agrade	the sell operation with the sell operation will be possible operation with the possible operation of the Huning at 1275 re. This	the set to pera soperate with series and with series and the Haming at 1275 are. This re.	the feed	ig hole,	ਦੇ ਕਰ
he RLC ents oc able fia 30 was downs	t OP real on the minutes all on the minutes all thous all thouse all thousand the month on HNF one is in the thing the thing the thing the thing the things are all t	LOP real number of the control of th	gas va	seriou	OR T.
D and curred soo ing income soo income soo income i	e FCC: (ffara s fffara s ffara s ff	e FCC (ffare s of CO- nd CO- nd CO- nd CO- r High s r High s s ervic n servic n servic n servic n servic n servic n servic n servic n servic n servic	ow cont	s trippir	P.1
FCC full for both find both colors to back to the PS	ider flare ca ample 6, bega t in sigl yessur- be and t t of a tra t to cau t to cau t to cau of an R	flare ca ample 6, bega 6, bega f in sight resource se and f to cau f to cau	r F-305	ng haza	A, C. 18
Kees flares 5 fleria. Ine			<del></del>	<u> </u>	
	Operational Process/Procedures	Environmental	Operational Process/Procedures	NL-Lessons Learned	Equipment/Property
	Proceed:	onle:	Proced	ins Lea	ntiProp
		유도학생수	<b>.</b>	med	
	(1) Wrły did V-1810 PSV iif? V-1810 PSV IL#1601 Lified 100/PSI lower than Its selpoint. Wry did IL#1601 relief veh 18 100/PSI lower than Its selpoint. IL#1601 iifled 100/PSI k than Its selpoint due to error in Selting pav or Physical femage.	(1) Why did V-1510 PSV III'? V-1610 PSV II.#1601 Lifled 100PSI lewer than its sepoint. Why did II.#1601 rolls val fit 100PSI lower than its selpoint, II.#1601 illed 100PSI is hand its sepoint due to error in Setting pay or Physical demage.	(i) if uell gas control valva dosses shut due to Feeddoward control systems logic insisted of going to min flow and not understood by operations. (2) F-305 Minimum Flow Line Failed to maintain minimum possure (including PCV-0727) (3) Pig lail past pomalities appearancy 0720 years., (4) 20 Plant not shut down under downstream K-1900 upset Plant not shut down under downstream K-1900 upset 215 bas to 90 bs. In the past, the drop was not as severe as fast.		(1) 1. Why did the "above" happen? Sast faces experience the marging accessive dry un responsation conditions. (This wast action with productable failures occurring duting stant sard upsatis.) 2. Why did the "above happen? Single seal employed using plan 23 fush it is design cannot intensit employed using plan 23 fush it is design cannot intensit employed using the process to access. Thus seal faces run de minimized or shut off to the plan to the plan that is design cases when the stant is design seal design. The face minimized for shut off to the plan to 25 double seal design and grapher? Sometime in the past, a Plan 62 double seal design and grapher? Sometime in the past, as Plan 62 double seal design seal design and the seal faces a was replaced with a Plan 52 shut of the process. (Plan 62 double seal design and seal faces are seal replaced with a Plan 52 shut of the process.) The Plan faces. Nitrogen pressure keeps the buffer fluid pressure a process pressure. A Why did the "above happen? There are not occurrentalision as to why the seals were convented frou double to single. It may have been seal reliable to single. It may have been seal faces. Nitrogen persure seal was penditor only resolution only. Possibly lack, to know the past of the standard of the past of th
	did V-1 ower th St lowe	did V-1	gas cor ystems od by c mainta ill past ishul d is. (5) o 90 lbs		y did u g axoss of a war
:	B10 Pa en lla : r than l	610 Pu an its r than I	ntrot va logic in peratic peratic in mini normal normal normal cown ur Compre s. In thu		sisted de la control de la con
	SVIIN? Is setpoin Is setpoin	SV IM7	hya do: hstead hrum p mum p life ex life ex der do basor a pasi,		wo" ha y run w laable fe dalaable fe da de he "? 2 flush i in freque so who y s who e so who y i who passan a 2; a de he w laable fe da he w laab e he w l
	V-181 L. Why oint, IL.	V-1611 L Way oint, IL	of goin of goi		ppen?  This is turne a cooper of the transfer of the transfer of the transfer of transfer
	0 PSV did IL# #1601 up psv	D PSV did 11.# 11501	of the transfer of the transfe		Seat tas silicon coccurring the silicon coccurring the sign of off. S. A. Thus silicon coccurring the silicon coccurring the silicon coccurrence coccurrence coccurrence control contr
	L#1501 1601 re 1801 re x Phys	L#1601 1601 ro x Phys	o Feed n flow 1 num Fk ding Pk ding Pk o years. 900 up e dropp not as s		ces eximalification of the condition of
	(1) Wrły did V-1810 PSV iif? V-1810 PSV IL#1601 Lified 100PSI lower than Its selpoint. Wry dd IL#1601 relief velve 181 100PSI lower than Its selpoint. IL#1601 lified 100PSI lower than Its selpoint due to error in Selting pav or Physical dennegs.	(1) Why did V-1510 PSV III? V-1510 PSV IL#1601 Lified 1007SI lower than its selpoint. Way did 1.#1601 rollof valve its 100PSI lower than its selpoint, it.#1601 illied 100PSI lower than its selpoint, it.#1601 illied 100PSI lower than its selpoint due to error in Setting pay or Physical demage.	(i) if buel gas control valva doses shut due to Feeddoward control systems logic insisted of going to min flow and not understood by operations. (2) F-305 Minimum Flow Line failed to mainfain minimum pressure (Including DCV-072). (3) Pig lail past romail file speciatory of 20 years. (4) 20 Plant not shut down under downstream K-1900 upset Drant not shut down under downstream K-1900 upset 215 bas to 90 bs. In the past, the drop was not as severe or as fast.		(1) 1, May did the "above" happen? Seaf teres experienced damaging accessive day can experienced library accessive day can experience during startups wards accountly guinting startups wards accountly guinting startups ward startups and upsets. It was a fact upsets. It will not be a control guinting startups employed using Plan 23 tuch 11 till 6891g named tidents add to much water for the process to except. Thus each fuch so mich water for the process to except. Thus each fuch so mich water for the process to except. Thus each fuch so mich water for the process when the flush is off, the faces are diam's to excuse frequently during 18 Plant startups and plant upsets. This is a design less at the seaf faces are diam's the process water to the process and the seaf faces are seaf placed with a Plan 22 single seaf doesign. The Plant 62 design adds no water to the process and the seaf faces are design and the seaf faces are so process processor. A Why did the "above" begon? There is no documentation as to why the seaf were converted from double to single. If may have been seaf the face is the process possure. A Why did the "above" begon? There is no documentation only. Possibly lack of knowledge that single seafs water converted from the process of the startup and the properties of the seaf face such that the seaf faces are shown the seaf faces. Nilvegen personal seaf the seaf faces are so reliablely. After 27 years, we can speculate but cannot confirm reasons. 5. Why did the "above" begon? Speculation only. Possibly lack of knowledge that single seafs ward carult in potentially worse resaming was thanged from double to single faces. Seaf and the seaf faces are seaf eliablely worse resaming was thanged from double to single faces. Seaf faces and seaf of the process of the seaf faces and seaf of the seaf faces. Water to such a seaf faces are seaf faces and the seaf fac
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https://impacterm.chevron.com/IMPACT/ANYWHERE/Reports/exports/scenario_159134_f8a5390b-1e90-4874-b012-4d17412a3a40.htm 8/9/2012

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	Richmend, CA- 32659 Refinery	Richmond, GA - 32846 Refney	Richmend, CA - 32600 Refnery	Richmend, CA - 32553 Refinery	Richmond, CA - 32410 Refinery	Richmend, CA - 32414 Refinery	Richmend, CA - 32411 Refinery	Richmond CA - 32409 Refmany	Richmond CA - 32408 Refinery	Richmend, CA -	CA- 32360 Refinery
	end, 2/29/7012 2:00:00 PM	97 FW	ond, 2/29/2012 12:00:00 ry AM	_ <u>_</u>	, -	1 <u>.</u>	end, 2/16/2012 8:00:00	1 0	ond, 2/16/2012 2:30:00 ry PM	ond, <i>2277</i> 2012 7,00000	9:00:00 PM
	Closed	Closed	Closed	2 Closed	2 Closed	Closed	Closed	Closed	Closed	2 Closed	Closed
	Near	C No	Near Loss	Near	Near	Near	Near Loss	Near	Near Loss	No ar	Loss
	Fully Crated Equipment delivered without MSOS or evidence equipment was property deaned	8 Plant Setentum	Primary Communications link down. Ran on backup.	Tripping hazard on the steps of the Admin. building	Green Card. Tos boards not secure on deck. Location: S Isomex	Green Card, A sleam the loak needs to be fixed, Location; S. Isomax K-300A	Green Card, Overhead steam leak needs to be fixed, Location; NHT R-410	Green Card, Overhead steem leak needs to be fixed. Location: S. Isomax	Green Card. Conduit with exposed electrical wires. Location: S. Isomax	Curing a steam loadshed there were 3 bollers that were not available due to multiple lesses.	RLOP Flaring due to K- 1900 surging
A review of process vessel depressurization records determined that there were no records for the process vessel depressurization that occurred at R-1410B in the H250A Alfysition Plant commencing on March 7, 2011. Mart BAACHID Reg. 5-10 Process vessel Depressurization (PVD) mortforing in the preferent control of the preference of the prefer	Crails was delivered from the field to the taily room with NO paper work and the crails was nalled shut so you couldn't lelk it was deered. The equipment in the crails was sufficed the day after the crails was delivered. The reason the crails was sufficed was because the Taily Room asked the question if the equipment was casen. The MSDS was brought over the earne day the equipment was suffect.	On Feb. 27th, 2012 on day shiq Hydrogen A train tripped due to an FSC trip. When Hydrogen A Irain shuls down, steam becomes scarce throughout the refinery. When the steam becomes scarce, the RSLUSTL made the call to go on a "Seam load shee" throughout the refinery. 8 Plant steam was choped by contains to help with the steam lead shee! The board operator at OWS1 was assisting OWS2 with the shut down of Hydrogen A Irain while balanching the steam system at South Isomax, Charing all the chosa, the OWS1 was the seam for the call to the outside operator to outs 8 Plant stripped and the stripped water is all troubed on-test, the selection inside C-820 will got washed away to the bloreactor. This can cause a high amount of selection to consecut, This includes the ond cause a reportable amount of selection to the overation. The Indiana C-820 will got washed away to the bloreactor. This can cause a high amount of selection to the overation the increased on cause a reportable amount of selection to below 34 ppb. (Hormally, operations tries to keep this selection at the bloreactor below 34 ppb.)	Primary Link intermittant down 80%. Ren on backup which caused no outage or interruption.	A non-skid stifp was halfway losso on the stone steps in front of the edinin building and creating a potential tripping hazard.	Green Card. Almost tripped white walking the 1st deck when the los board carns off from weld, Location: S. Isomax, F-355/B-Train	Groen Card. A few 3/4 wolded steam fine feaking bad that needs to be fixed because it's near wallway and makes a very high noise. Also some employees are working near the leak. Location: S. Isomax K-300A		Green Card. An overhead steam leak needs to be fixed before it gels wone and it needs scaffold to get to the leak. Location: S. Isomer, South of D-2520	Green Caud. On the very top of the strucker next to glass window on Tank D2025 from is a conduit with exposed electrical wires. Location: S. Isomax - Tank D2025	Refinely has 3 plants still shuddwan 14 hours into a H2 emergency and steam toadshot beliers should have been available. AT Belier was being first up to start last right and the louver's would not stay open, gradually closed, tooks like an air lesk. Main, began working this issue fixal titing this monthing. Whind box kill. Wky couldn't we run incure in manual 17 look leng time to figure out this toiller wasn't goin glo work. Should have cut bosses sconer: *#1 belier has leake from the drum but can run fine and does not letk once up to imperature. The pastets's ware being replaced this Wadnesdry. The fan was not incure drawn the root as sone or manual restrictions in motical bodier in he medient happensa' y electrically that the sware were not operating properly. Maint, carne out for a plannad PM on this system. These powers amond be greated with fillings as there are none. Seaked bearings. (Maint free) Should be good to 15 Victings! Working with Massiy on now to repetir. The towners sick past 80%, Could have run belier at reduced loads.	product to exit down the tall gas line to K-1900. The PSA was immediately shurdown and control was resigned to K-1900 and flating ceased.
	NL-Business Process - Business Process	NL-Environmenta) - Raidase	NL-Business Process - Business Process	NL-injury/illness - Employee injury	NIinjury/iliness - Contractor injury	NL-injuryillinass - Employse injury	NL-Lassons Learned	NL-Lessons Learned	NL-Lessons Learned	NL. Business Process - Business Interruption	Operational Process/Procedures
		(1) Operator did nod himself accountable for not following procedures. The operator is well aware of routing stripped water of tless when steam is removed from a Plant, but he tropp during the chasp of Hydrogen A. Train shutting down. 5 May for LIVILI ID # 32646 What happened? High selenium was sent to the bible seator? I pipo versus normal max of 34 pipo, (hib emirronmental incident locurined, but loculd have appened if this issues was not resolved.) Why? B Plant sent a large amount of selenium flare It was shut down due to a steam load shed. Why? B Plant shirped water remained on. test after all steam was cut of the plant, I Couled on-less while making off-test product.) Why? Operations frogot (for an hour) to Inform outside operator to route stripped water off-test after steam was cut from the plant. Why? During all the chase of Hydrogen A Train tripping and shutting down. OWS3 operator was distracted with helping OWS2 and belancing steam system. Because of the distraction the operator did not follow procedures.								(1) STL made judgment error on keeping #1 boiler available for maint, rather than runding it. Varies sticking on #3 Boiler arcamon's belief that everyone knew why. No information from the PM conducted or the maint repair work. (2) Pear PM description. Operations it not required or asked to work with the maint, folls to move the varies and ensure are mechanical integrity. (3) #7 and #3 Boiler not run in manual as they could have. (4) No troutine health chack on the boilers to ensure they are mechanical integrity.	

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	32772	32760	32767	32755	32741	32734	32722	32722	32680
	Richmond, CA.	Richmond, CA - Refinery	Richmond, CA - Rafinery	Richmond CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond CA - Rafinery
	2/27/2012 9:00:50 PM	3/3/2012 11:15:00 PM	3/3/2012 7/30:00	3/2/2012 12:00:00 AM	3/1/2012 12:00:00 AM	2/25/2012 3:30:00 AM	3/1/2012 12:30:00 PM	3/1/2012 12:30:00 PM	377/2011 12:00:00
	Closed	Closed	Cosed	Closed	Closed	Closed	Closed	Closed	Closed
	Loss	Near	Near Loss	Logs Near	Egg.	Loss	Loss	Loss	Near
	Wash water not shut off in E-711's After FKC Shudown	Loss of flow to FCC during fleed switch from T-3194 to T-3196	Pump tagged out of service	Missed routine duties and no corrective action form was initiated.	K-910 Starup delayed	Minor Flaring due (b 16PC000A (Recycle H2 Loop Pressure Contoller) suspected sticking.	NPDES pH exceedance on sterm water run-off	NPDES pH exceedance on storm water run-off	missing pvd paparwork
SISO operators were in the process of setting 20 Plant up for once through cooling of R410/11. Procedures were in hend and being followed, the RLOP overhead gas line was blocked in al 20 plant. The flow would normally be	After puling feed from the TKC on 2/27/12 at apx 8:20 PM, the wash water injections to E-7/4, E-450 and E-7/1 were left running, Befow are the estimated volumes of water and oil that were sent to the FCC feed tank and down the Wald Naphtha line: *To FCC feed tank via C-7/10 bottoms — 13,000 gallons of shipped sour water - To BSR via V-7/10 overhead —3.9 MB of Wild Naphthe with high water content	After gelling good samples results on T-3196, T&B got permission from FCC to make a feed which from T-3194 to T-3196. As soon as T-3196 was switched to the FCC, they saw the feed quality change to a tipher slock and then a loss of flow to their feed pumps and immediately reported it to T&B.			K-010 starup was delayed due to It's Shuldow/rumning tuulen on the honeywell page not being reset to the numning mode. This subsequently caused a delay in stahup are selchicians troublestos and eventually dourd the open relay statup as seccited with the reset buttien on the thompywell page.	Minor Fishing due to 1BPC000A (Recycle H2) Loop Pressure Controller) supported tilteling, On 2125/13 at approximately 03.39 BHT PCO recleved increased statement that V-1820's level (16L021B) had spiked from 50% to 80% and dehobing causing a neigh pressure increase on the 1AP pressure Loop system (which during steady state operation vents to 5 H28 via 10PC000A) As level and pressure increased (18PC000B) Minch vents directly to flare, opens to 40% output for exproximately 15-28 seconds causing minor flaring.	As per our IPDES permit, we are sequired to sample storm water run-off prior to the water entering a public body of water. This is done during storm events for areas where the water first contained. The water must need several containing to the constituents to be considered on-test. One of these constituents is pH. The water sampled at Gertrude SI site on 3/1/17 tested at 8.7 pH while the upper limit is 8.5.	As per our NPDES permit, we are required to sample storm vater run-off prior to the water eliming a public body of weller. This is done during storm events for areas where the water isn't contained. The water must meet several constituents to be considered on-lest, One of these constituents is pH. The water sampled at Gerhude St site on 3/1/12 lested at 8.7 pH while the upper limit to 8.6.	9 6
	Operational Process/Procedures	NL-Operational Process/Procedures - Plant Run Out/Stow Down	NI_Business Process - Business Inseruption	NL-Operational Process/Procedures - Safety Systems	Operational Process/Procedures	Environmental	Environmentel	NL-Regulatory Compliance - Non Compliance - Water	NL-Regulatory Compilance - Non Compilance - Av
(1) Why did we overpressure V-1120 and trip the FCC localize. Because the V-1120 examined jumpower line at the NISO boundry was bindeed in and normal routing to 20 plant gas blocked in of a Once-Through, Why was the everhead jumpower valve blocked in, Because work was done on the fine during the 40 RLDP StO and did not get unblocked after the line was unblinded. Why did the valve not get unblocked.	(1) why was there an excessive amout of water carryover to FCC feed tank and wild naphthe stream? Excessive emounts of water due to west water injections in TXC not being isolated for 25 hrs after feed pull. Why were the water injections told open? Leck of good communication at turrover and operator oversight seed to the hijections not being blocked in in a timely manner.	(1) The line setup was not checked thoroughly enough before the switch was eltempted, to find the cold line below platform	-	(1) The CHO did not check the hand held for routine duties due on his shift and failed to identify the missed duty during the HO approvet process.	(1) K-919 Stantup delayard. Wirky was K-919 etartup delayed K-919 would not islant. Why avoild K-919 not learl? K-919 would not islant. Why avoild K-919 not learl? K-919 would not start because of an open relay. Why was there an open relay? The relay was open bocouse the K-919 Reset switch was not reset on the honogy-wait Why was the least switch not reset on the honogy-wait Why was the least switch not reset on the honogy-wait Why was the least switch not reset on the honogy-wait? Operators lock of knowledge around this reset.	(1) V-1620 Level Controller LC-1620 0218 slicks	(1) Leck of Skill or knowledge	(1) Lack of Skill or knowledge	(1) Procedure did not specifically state turnover processes between File Marshall, Bettellon Chief and from craw to crew.  (2) Procedure did not specifically sate turnover processos between File Marshall, Bettellon Chief and from craw to crew.  (3) Did not understand the swerifly Environmental Compilance nex for follow-up monitoring.

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	32957	32916	32936	32886	32884	32844	32840	32840	32804
	Richmond CA-	Richmond, CA - Resinery	Richmond, CA - Refinery		Richmond, CA - Refinery	Richmond, CA- Refinery	Richmond, CA - Refinery	Richmond, CA Resinery	Ricamond, CA - Refinery
	362012 6:00:00	3/1/2012 12:00:00 AM	3/1/2012 12:00:00 AM	3/5/2012 3:00:00 PM	3/5/2012 11:40:00 AM	3/5/2012 5/20:00 AM	3/5/2012 4:30:00 AM	3/5/2012 4:30:00 AM	3/4/2012 9:40:00 PM
	Cicsed	Closed	Closed	Closed	Closed	Clased	Closed	Closed	Closed
	C 033	L New Y	Near	Loss	Loss	E 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5	Loss	Loss
	Pipe rolled off bench and	Vendor sent wrong material 304ss ordered 316es	Vandor sent wrong material 304ss ordered 316ss	Direct burial line was damaged	Duting Seal inspection T- 3105 observed oil in #2 Pontoon	Finger caught in vecticle	EE fell through pallet.	EE fell through pallet.	Flaring event white setting 20 plant up for once through to N Iso.
	Mechanic was fitting a 10 inch fig to a piece of of pips about 2 ft (eng when pips roted off "V blocks" and struck es on fool.	vendor sent 304 ss pc. pipe on PO 10133883 and when PMI was done if was 316 ss. pipe was not marked.	vondor sort 304 as pc. pips on PO 10133883 and when PMI was done it was 316 ss. pips was not marked.	While drilling a 24° diameter hole for a camera foundation the drill came into contact with a buried phone line.	During Saal Inspection of T-3105 obseved oil in #1 pontoon of the floating roof and made notification to HES	While exting the RLOP van an operator's imper was inadvertently pinched to be door.	EE stending on patiet neer 53 Gate fat through.	EE standing on pallet near 53 Gate fell through.	diverted to 4H2S through P02154. A valve on the RLOP over head gas line out in the pipeway in front of NISO was left in the closed position. This valve is normally left in the open position, and was left closed from the RLOP mejor. This backed RLOP out of the system which over pressured V1320 lifting the PRD to malet.
	irjury/iliness	NL-Quality - incorrect Product	NL-Business Process - Business Process	Equipment/Property Damage	Environmental	injury/iin ass	NL-injuty/iliness - Employee injuty	រាគ្ន់បក្សវ៉ាតែess	Environmentat
(1) Why Did PSA startup trip FCC/Altry totalizers? PSA startup tripped FCC/Altry flare totalizers because the PSA product line overpressured and work to flare gas recovery.	(1) 1) Lack of adequate procedures or work standards, incident June 2025? Business Unit Routine Maninearces Location Boiler Shop Facility Mann Richmond Refinery Incident date 35/2012 Type of Process; Pipe Fablication Type of Equipment: Team Members; Alan Cowell, Jun Jean Mann Ken Hopkins, Don Lorr Gany House Incident Description: What; On 34/2012 a Corpanyary mechanic, working abone, was fasticaling a piping spool in the Boiler Shop on a large malal work bentha about 20 high, He was attempling to weld a piece of 10° diameter pipe – 27° long to a 10° weld neck fampe. The pipe was realing in 2 °V-blocks' which keep the pipe he was the pipe who will also will be pipe. The pipe will be 16° leaning to 10° l	t	**	(1) Markings for the buried ceble was approximately 20' away from the drilling location. The crew was more focused on the overhead hazards than the buried phone line which was to be relocated if contact was made.	(1) We cannot ascertain the failure without taking tank OOS	(1) Hand was placed along door lam between front pessenger door and rear skiding door. The injured persons hand was placed there to meintain their before while they grabbed their personal bag from the back seat. Person axing from the back seat. Person axing from passinger door cold not see injured persons hand their had been placed along the door jam. The front passanger door was closed pinching the persons ring finger finger up in the door.	(1) EE failed to realize that stepping upon a pasel is considered unsafe and could load to injury.	(1) EE failed to realize that stepping upon a patel is considered unsafe and could lead to injury.	Because their was confusion on who owned the valve. RLOP believed NISO owned the valve and NISO believed RLOP owned the valve, Why was their confusion on the ownership of the valve. The valve is localed along Channel Street outside of NISO's piot limit.

https://impacterm.chevron.com/IMPACT/ANYWHERE/Reports/exports/scenario_159134_f8a5390b-1e90-4874-b012-4d17412a3a40.htm 8/9/2012

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	33167	33167	33152	33147	33134	33049	33045	33045	33003	33003
	Richmond, CA - Refinery	Richmond, CA Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA -	Richmond, CA - Kelinery
·	3/8/7/012 2:00:00 PM	3/8/2012 2.00:50 PM	3/7/2012 12:00:00 AM	3/8/2012 9:00:00 AM	3/8/2012 8:00:00 AM	2/3/2012 12:00:00 AM	3/7/2012 12:00:0G AM	3/7/2012 12:00:00 AM	9///2012 2:30:00 AM	3/7/2012 2:30:00 AM
	Closad	Closed	Closed	Ctased	Closed	Closed	Closed	Closed	Closed	Closed
·	Loss Near	Loss Near	Near	Near Loss	Near Loss	Coss Near	Naa.	Loss Nea:	L038	Loss
	Lost LOTO lock key box #1854	Lost LOTO lock key box #1854	Warehouse representative disposed of 15 recialmed fire hydrans. Hydrans free hydrans alter found in a dumpster and necrement.	Loss of foto key	Groun Card, Repair handrail, Location: B&S Bridge 134	Supplier Overpayment	shelter in place driff @ QCD commulcation was very poor.	shetter in place drift @ QCD commulcation was very poor.	PSA startup Inpped FCC totakzer	PSA startup tripped FCC totalizer
	White attempting to un-LOTO pump operator found key from tock box #1854 had become lost at some point in the past.	While attempting to un-LOTO pump operator found key from lock box #1854 had become lost at some point in the past.	Warehouse representative disposed of 15 reclaimed fine hydrants that had been siling outside the #8 warehouse for more than a year. These hydrants were put there based on device of a mistinal controller who no lenger works in the warehouse and did not communicate to the peece what was supposed to be done with the hydrants. The hydrants were put into a dumplet as part of nousekeeping and because the sorekeeper who was doing the clean-up did not realize the hydrants were to be kept. The dumpster was moved to reclaimation where they were recovered. Hydrants relocated to a pince in Reclaimation where they were recovered. Hydrants relocated to a pince in	LDSI K 1100A Ido key	Green Card. I Land the handrall to belance myself and II gave way. It still appears solid but II is not. Please repair. Location: B&S Bridge 134	Order was created and paid against receip of order instead of paying against protec, throice charge was test than cost on Purchase Order. Purchase order trigged an overpayment of \$8,414.11.	sheller in plece drill at QCD never saw floor warden, no one took role no druck upe in room. The speaker in the room wearn't clear, People attling out aide and not in the bldg.	sheller in place drill at QCD never saw floor warden, no one took role no duct lape in room. The speaker in the room wasn't dear. People silling out side and not in the bidg.	At 02:30 AM in 3/1/2012 operations was attempting to startup the PSA when pressure went past the 380 its set point and continued to climb. The PSA was immediately studiown and operations repotated the linear. The pressure control valve on the culte of the PSA 64/02/415 was still striple broated. Operations uponed the valve and castlated the PSA with outlier issues. Review of the procedure shows no step for ensuring the PC is unblacked.	At 02:30 AAt in 37/2012 operations was altempting to startup the PSA when pressure went past the 380 ib set point and continued to climb. The PSA was immediately cludewn and operations nechacted the insulp. The pressure control valve on the outsid of the PSA 64FC2A15 was still ships blocked. Operations operated the valve and restricted the PSA with no further tasses. Review of the procedure shows no step for ensuring the PC is unblocked.
	Nt-Operational Process/Procedures - Safety Systems	Nt. Equipment/Property Damage - Equipment Damage	NL-Lessons Learned	NL-Business Process - Business Process	NL-injuy/ižness - Employse injuy	NL-Business Process - Business Process	NL-Lessons Learned	NL-Business Process - Business Process	Operational Process/Procedures	Regulatory Compilarice
(1) The APP falled because Header Information went had on 2 drives Why did the drives fail? Drive falled possibly due to nonling older FW on Percs Why was the server running older furning older favor of the server should be shown the server should be shown the server shown the	•			-		-		-	(1) Why Did PSA stantup trip FCC/Alky retailizers? PSA startup tripped FCC/Alky free totalizers because the PSA product line owerpressured and went to fate gas recovery. Why did the FSA product line owerpressured? The PSA product line owerpressured? The PSA product line owerpressured? The PSA product line owerpressured the cause the Pressure controller downsteem block valve was closed. Why was the product line valve closed? Operations missed operation the product line valve closed? Operations missed operation are controller surveys. HO blockeds in PC dail's ineque was verified to Leak check one more valve. He instructed the outside operator begen the PC block up but ratio didn't treatment. Started the PSA was before the redeved a continuation of the order. Why Did the HO stattup the PSA paint to radio continuation and was unblocked? The head operator shoricut the radio prolocal believeing the operator undestated of intend his order before the PSA was started up.	Why did the TSA product line overpressure? The PSA product line overpressure on-violed flow overpressured because the Pressure convolled downstream block valve was closed. Why was the product line valve closed? Operations missed opening the block valve during start up preparations. Dus to head open downs to the states. HO blocked in PC effer lineup was verified to Leak check one more valve. He instructed the obtained the PSA up before the received a confirmation of the order. Why Did the HO stategut the PSA perfect on affect with the PSA up the form the received a confirmation of the order. Why Did the HO stategut the PSA up the Form of and confirmation releved that product controller was unblocked? The head operation shorted the radio protocal believing the openator understood or heard his order before the PSA was stated up.

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	33255	33248	33248	33243	33243	33106	33170
	Richmond,	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Rofinbry	Richmond, CA Refinery
	392012 7,00:00	3/9/2012 4:30:00 PM	3/9/2012 4:30:00 PM	3/9/2012 9:30:00 AM	3/9/2012 9:30:00	3/6/2012 5:00:00 PM	2/26/2012 12:00:00 AM
	Closed	Closed	Closed	Ciosad	Closed	Cipsod	Closed
	Loss	Neer Less	Noar Loss	Loss	Loss	20 BH	Near
	Small piping leak on V- 1421 (IC4) drain fine lo	Electrical Lube oil pump K- 1601 tripped	Ejectrical Lube oil pump K- 1601 tripped	Operator bang his wrest to keep from falling overboard in a work boat.	Operator bang his wrest to keep from falling overboard in a work boal.	135# steam introduced into P-2 suction heador at #1 separating facility	APP node 32 failed, test two DMC controlers in D&R
	At - 18:00, while making rounds, the plant operator found an IC4 leak off of the bottom of Y-1421 Economizer. The leak is on the 3" drain line off of the pullet	The PRT was being taken but of service to prepare for the start up of P-1501a when the Aox lube of pump started then tripped out. The Breaker tripped in the MCC.	The PRT was being taken out of service to prepare for the start up of P-1601a when the Aux tube of pump started then tripped out. The Breaker tripped in the MCC.		During a Cil Spill Italning exercise a sperator was thrown over the side when another injured this wrist Lyring to keep from being thrown over the side when they were making a lurn and a water hill the boat causing one operator to (a) overboard and when coling so the sudden shift in the boat the other operator put his arm out to stebilize himself injuring his arm	Operations was attempting to pump-off a vacuum truck corraining gascine into T-3127. P-2 was thaving difficulty pumping the product from the vacuum truck; It was not moving. The operator opened the bleeder to vent the pump case and bleed off any air tapped in the innelpump case but was still unable to move product. The pump was struit down and the line was retracked for a possible closed valve. White escheding the valve alignment Ops discovered that the discharge ine was extremely held to the touch. Upon further investigation it was determined that a 135% steam valve was cracked open allowing steam into the bump suction hasdes. The steam was pressuring up the suction line and vapor looking the pump.	Servar failed because 2 of the 5 Reid controller Hard Drives failed. The 2 DMC controllers truring within that App Node server for advance control were unevailable for use while the servers were down.
	Environnenisi	NL- Equipment/Property Damage - General Liability	NL-Operational Process/Procedures - Plant Run Out/Slow Down	ักวุ่นทุ/ก็ไท <del>อ</del> ธร	NL-injuryiliness - Employee injury	NL: Lossons Learned	- Business Process
(1) Incident Number 33256 Business Unit Cracking Location Alky Facility Name Richmord Incident date 399/2012 Type of Process: IC4 Type of Equipment, Piping Team Members: Leura Leeds Mari Lemkel'Bobby Guihmiller Fransil Prasad	(4) Incident Number 30255 Business Unit Cracking Location Aity Facility Name Richmond Incident date 3020/12 Type of Process: IC4 Type of Equipment: Piping Team Members: Laura Leeds Mark Lenkalbuby Guihmiller Famili Prasad Daie Burne Ron Moore Gerando Ibarra Ron Moore Incident Dair Burne Ron Moore Gerando Ibarra Ron Moore Incident Office of the bottom of V-1422 and Leeds Mark Lenkalbuby Guihmiller Familier Plant Department of the number of the number operator found an IC4 leafs of of the bottom of V-1422 and Economizer. The leak was on the 3" crish line off of the outlet of V-1421. This investigation covers why did the 3" carbon steel piping fell off V-1421 outset, FIVE WAY'S 1. Why did "Condition that exist in this piping design. Stegnant conditions alone of the outlet of V-1421. This investigation covers due to the outgrant condition that exist in this piping design. Stegnant conditions alone of the stefur was as a tele connection where deposits would naturally called in a stegnant zone.  The exact location of the faiture was and being monitored by our inspection program while offers lenguage the stegnant zone.  The exact location of the faiture was and being monitored by our inspection program while offers lenguage the stegnant zone.  The exact location of the stefur was set being monitored accordingly, but the inspection methods that were used dead a coordingly, but the inspection methods that were set dead a coordingly, but the inspection methods that were being RT insert and the failure as no CM. Was placed on the step and the step of	(1) bearing failure of auxiliary jube oil pump, the pump was original install 20 plus years, (2) back up tube oil pump P1683A hand switch has normally set to off as it is a back up to the spare	(1) bearing failure of auxiliary lube oil pump, the pump was original install 20 plus years. (2) back up lube oil pump P1683A hand switch has normally sat to off as it is a back up to the spare	(1) Lack of experience on present equipment and training.	(1) Lack of experience on present equipment and training.	(1) The root cause of the incident was the failure of an unidentified individual to tag a waive that was opened which is normally closed. (2) The turnover did not reflect the current status of the plant; that a normally closed steam valve was opened on the identified pump., (3) Possible unauthorized (contracting access by an undentified individual who opened the valve while discharging a funct.	been approved and we are waiting the bunds this with another Patch upgrade to the APP node or we can infilimite APP node rebood and APP node down time. Root cause was rod estemined. The root cause is politting to the Perc FW furnising on the APP node

	33385	33975	33287	33270	33286
Richmond,	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA -	Rickmond, CA -	Richmond,
Richmond, 1/25/2012	3/11/2012 6:00:00 PM	9/21/2011 12:00:00 AM		3/8/2012 9:30:00	90/2012 7:00:00 PM
	Closed	Closed	Closed	Closed	Closed
	65	Cogg	Loss.	L Ne sa	Cos
Reduced feed rales on	8* Panhax condensate velve bonnet leak	Late Submission of revision to RI-382	K-1420 tripped off line, Alby Pfant fixed to be shut down.	Delay in feed switch 220R to 500R in HHF due to out deled sample result	Small piping leak on V. 1421 (IC4) drain into to blowdown header
INIC feed rates have been approximately 17.5 - 20.0 MBPD vs the LROP & AOP pinn rate of 24.0 MBPD. Throughput is similed due to a combination of positive draft on the NHO (untract outside and high NHO vs. his F-1551 tambes albox, Processe Engineering has expipiled date showing that the presumo drop errors F-1551 DeNOx catelyst module has been increasing since for 6(2)? Alloy TIA. As the OP increases, the draft on the HNC distultation fundaces (F-1500/1550) will go positive creating an unsafe condition. To mitigate, the DeNOx module is partially by asseed (AOC in place). The module can be bypassed only to the point that the F-1551 furnace steck stays below the 40 ppm	OpenBlond Scovered the Znddeck plot limit 8" Condensate velve to the Parhax had a severe test on the bonnet. Several botts were on the cement below.	CCHMP request for revision and re-submittal of RI-382, Management of Organizational Coanges with repart to maintenance and/or health and safety procedures associated with an organizational change.	On 3/10/12 at 23.12 Utilities Section and the Alby CBO both received stemms that the breakers (12-710 (K-1420) and 12-704 (Harmonic Filler)) for K-1420 had tipped open. Upon investigation and troubleshooting, the breakers would not reclass. Feed from the Afty plant was pulled, Just after daylight sewing time at 3 am, we were able to enable the compressor logic to allow for the breakers to be recked in Utilities recked in the breakers, K-1420 was started up at 03:20am, Again on Monday 9/12/12 at -08;16, K-1420 openience another similar for and ware unable to crest the tip condition again which resulted in feed cutage at -08:40 for -3.5 hts until the compressor was restarted.	INITIAL DESCRIPTION SEE LINK ATTACHED IN INVESTIGATION FOR COMPILETE TOP REPORT TORIGH tops was preparing for an HIMF block switch from a 229R to 600R run, RLOP normal procedure HNFN4132 Step 1 has us Verif; the current KF H2D sample results, from the wazy feed supply fank its less than 100ppm. Operations noted that the last sample result for KF water was entered into Staffers 1/25, so at 930 PM 88.5 was asked to expected the first staffer of 1/25, so at 930 PM 88.5 was asked to expected the first staffer of 1/25, so at 930 PM 88.5 was asked to expected the first staffers 1/25, so at 930 PM 88.5 was asked to expected to the staffer of 1/25 and	At ~ 10:00, while making rounds, the plant operator found an iC4 teak off of the bottom of V-1421 Economizer. The leak is on the 3° drain line off of the outlet of V-1421.
	Equipment/Property Demage	NL-Business Process - Business Process	Business Process	NL-Business Process - Abnormal Supply Occurrence	Loss of Comainma
(1) No Standards, Policies or Administrative Controls, (2) Trending Needs Improvement, (3) Stuellon Not Covered In	(1) Newly installed 8' condensate valve developed bornet leak, (2) Condensate system is not designed optimally for current needs	54	(1) Loss - Alky Pitel upplanned shutdown 1. Nhy did the plant shutdown 2. Nhy did K1420 upp at diffine and could not be restanted. 2. Why did K1420 upp at The controller initiated the tip. 3. Why did the controller initiated in the controller believed an "external lift" element actuated when the DCS did not see the "external lift" element actuated when the DCS did not see the "external lift" event when the DCS did not? a. The controller operated such that the tip cause was undelectable? A Why was the controller services under the controller services under the controller services under the controller's policy undelectable? a Inconclusive at this time, Additional testing is required to delemine this answer. The testing required to delemine this answer. The testing required to the controller's the controller's actions.	(1) SOS: Training & Procedures : No One on Impacted Crew Trained; (2) SOS: Training & Procedures: SOP Unclear, (3) SOS: Training & Procedures: No Commentate on on Priority SOS: Training & Procedures: No Commentate on on Priority of When Sample Wate to be Run , (4) SIDEBAR ISSUES: SOS: Design & Engineening; QOD Unawarar of Need to do MOC when New Equipment is Accided	Date Blume Ron Moore Gerardo barra Ron Moore Incident Description: At -18:00, while making rounds, the plant operator found an IC4 leak off of the bottom of V-1421 Committee. The leak was on the 3" drink in the off of the outlet of V-1421. This investigation covers why did the 3" carbon steel piping fall off V-1421 outlet. FIVE WHY'S 1. Why did "1" happen? I hap piping had a faiture due to inder deposit correction at a fee connection. 2 Why did "1" happen? Under deposit correction covers who the stagmant conditions of the faiture was at a tee connection where depositis would naturally called in a shapmant condition where depositis would naturally called in a shapmant condition where deposition of the faiture was not being monitored by our inspection program while other locations inches away were being RT monitored on a 10 year frequency per API Class III. 3. Why did "2" happen? The stagmant conditions ovisit in the line due to the endplind design of the piping and is intended purpose. The piping was being monitored economically the happen was being an offer the piping and is nitred the program while other was being an offer one whose of the stagmant conditions ovisit in the line existing a figure of the piping and is nitred and the stagmant conditions ovisit in the line existing a figure of the piping and is nitred to the specific design of the piping and is nitred was because appropriate felline modes were not incentified during initial inspection plan realion. 6. Why did "4" happen? The was focated or to give the modes were not incentified during initial inspection plant arealion. 6. Why did "4" happen? The was never ovel under or redesigned for potential failure due to the

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	33519	33507	33490	33453	33447	33447	33389	33389	33388
	Richmond CA - Refinery	Richmond CA - Refinery	Richmond, CA -	Richmond, CA · Refinery	Richmond CA Retinery	Richmond CA - Refinery	Richmond CA Refinery	Richmond, CA - Refinery	CA - Refinery
	2/14/2012 12:00:00 AM	3/14/2012 8:15:00 AM	3/13/2012 12:00:00	3/10/2012 5:00:00 PM	3/13/2012 6:00:00 AM	حنصما	, 3/12/2012 6:00:00 PM	. 3/12/2012 6:00:00 PM	12:00:00 AM
	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Cipsed	Closed
	Loss	Near	Loss	Near	Loss	Loss	Loss	Logi	Loss
	Priodizing FCC est dump valve as a four resulted in a catalyst scifvily loss. FCC catalyst model reficules toss in high value product is higher than production impact asitmate used to set priority for valve repair.	Green Card, Perking space lines are not visible. Location: Gate 91 perking tot	Focused on solving the leak problem rather than focusing on how the organization was managing the line leak.	Operator missed a once a monthly MTF inchestree duty. The HO did not set when the missed duty during his approvals and did not challenge the operator to get it done on time.	Possible insect bits during fire training	Possible insect bite during fire training	Hand, finger danger - pinch point car door- personal carnot work car	Hend, finger danger - pinch point car door- personal car-not work car	HNC due to F-1551 draft /
	the loss for February is about \$213K. The dump valve was broken on 2/14, and the activity storky declined until 2/3/12 (the last ECAT sample result), assuming the decline in activity & profitability is linear from 2/14, and that the losses are due to only the catelyst activity (excluding deed effects). So if the maximum dult josses was \$32k on 3/3/12, then the loss increased by \$1778 each day starting on 2/15:	Green Card, Main parking lot parking space lines are very hard to see when it is derk and rainy. Lines are not very visible any longer. Location: Gete 91 parking lot	Why did I, as the leak continued, focus on solving the problem rather than focusing on how the organization was menaging the V4121 line leak, such as plan development and task estellarments? Should have made sure who was closing what and placed superdations on required performance. As the problem was not getting solved, I focused my efforts on the actual problem and potential solutions and not on the process for solving the problem.	Operator missed a once a monthly MTF Intellates duly. The HO did not see the missed duly during his approvats and did not challenge the operator to get it done on time. MTF Operator claimed he did not see the once a month duly on his handheld.	EE showed signs of a possible insect bile on his ricalf	EE showed signs of a possible insect bite on his ricalf	S.O. slammed finger in car door	S.O. slammed finger in cer door	NOx limit (8 hr rolling avg). As a result, the HNC is limited by both draft and F-1551 NOx.
	Business Process	NL-Lessons Learned	NL. Business Process	NL-Operational Process/Procedures - Safety Systems	NL-injury/iliness - Employee injury	injury/i¥ness	injury/iliness	NL-injury/filness - Contractor injury	Operational Process/Procedures
(1) The main problem is that contractor retrestrer training was not conducted within the required time frame for annual renewal. Why was training not conducted? Because the contractor's Site Supervisor did not requestiarrange for a training session for the crow within 1 year of the most recent training session. Why was training not requested? Because the Site Supervisor wasn't sure when training was due. Why was the cits supervisor wasn't sure when training the stabilished tracking loof for monitoring the due date (on the training that	(1) Idenlifying Production loss used to determine priority of work released to catalyst activity is based in after the fact data		(4) Problem Statement (What is the key issue that needs to be addressed?). Why did individual, as the beak continued, focus on solving the problem rather than focusing on how the organization was managing the V412 if line leak, such as plan development, and task assignments? Stould have made sure who was doing what and piecod expoclations on required performance. As the problem was not pating solved, leader focused efforts on the ectual problem and potential solvitions and not on the process for solving the problem. FIVE WHY'S 1. Why did "above happens Still not dear how RIC works. I thought we could repair the leak without putting logather a formal plen and assigning responsibilities). I assumed averyone were self molivated to get it done. 2. Why did "1" happens Thought that the performance in the division was good and saw that the OA was all over It so it would get resolved "netwelly". 3. Why did "2" happens? Past experience had been that elling things happen naturally has been successful in Cacking. 4. Why did "3" happens? Because LC! Fin Fan repairs had been successful. People performed with a sense of urgency and competency in their respective position and levels so I was a belle or "ide along" on sching the problem. 5. Why did "4" happens had been successful in Setting the problem and not the process.	(1) HO did not properly check the inteletred database when doing approvats at end of shift., (2) Operator did not scroll far enough in the list. This previous practice was acceptable and not yet corrected, (3) HO did not follow willen instruction that was previously followed.	(1) unknown possible insect bile	(1) unknown possible insect bite	(1) Officer was not paying attention when she closed the door to her car. She did not ensure that her hand was safely out of the way before she shut the door, causing her finger to be smashed between the door and the car body.	(1) Officer was not paying attention when she closed the door to her car. She did not ensure that her hand was safely out of the way before she shut the door, causing her finger to be smashed between the door and the car body.	Prodecure, (4) Communication of Standards, Policies, Administrative Controls (SPAC) Needs Improvement

33537	33536	33533	33525	33822
Richmond, GA -	Richmond, CA - Refinery	Richmond, CA - Restriery	Richmond, CA - Refinery	Richmond,
3/14/2012 7-30:00	3/14/2012 7:13:00 PM	3/13/2012 2:30:00 PM	3/13/2012 2:00:00 PM	3/19/2012 2:00:00 PM
Closed	Closed	Closed	Closed	Closed
նու	Near	Near	Loss	Near 1033
MP-2511 seal bss	Contractor could not get Degass Unit running on time when T-3193 root landed white pumping T- 3193 to T-990	Manual Vis oil Bath cloudy by pparance maybe caused by proken mercury the mometer	P-104 Litt Pump Upper Bearing Failure	Contractor Training out of
MP-2511 seel loss, cause the SRU scur water concentrator to shut down, MP-2511 is the only feed pump. Sparis is available to replace only pump in plant.	1-3193 was being taken out of service and being emptied via its water draw to P-4 et 21 - 85 and pumping upshill to 1-390, 300 minutes sport to landing 1-71913/4 feating root at 7 - 7" (18-30 has) the onsite contractor was notified by the PCO to beigh wasming up the Degas built to start the degas process at appx 19.00 his. (fine it a root would fine), The contractor was also notified that Plant Degas for the Plant Protection had signed their had ledge was also notified that Plant Protection had signed their had ledge at 18-15 first that they could not get the unit started up. By this time T-3193's level was 7 - 0"	Operators entered the Isomax to botizo 51/4/2012 and realized the Oil in Manual Vis bally was cloudy. A second operator noticed the cloudy liquid appeared metallic. At the same time they noticed the thermometer was missing. They concluded the ele bath maybe contaminated with mercury; both soided the lab end called the Oil. The Hor filling of the entire Hill Sit. and CFD. CFD used a Jerome tester (Instrument used to test for mercury vapor and other load gases) to test for profession and the cFD confirmed that there was no mercury (0.000 PPM) outside of the VIS oil bath. The manual VIS bath oil compensative is regulated to 100 C or 21/2 F. Mercury boiling point is 51/4 F. Why duit he mercury themometer break? Investigation and envery "later update the reflection access was painted with a meallic finish the cloudy appearance maybe paintHazardous waste and Lab tech to investigate 31/5.	The upper beating on P-104 was making a grinding noise. Operations StD the pump and submilled a work request. Mil working with zone maintenance removed the cover plate for the upper beating and discovered the beating to be demograd.	Contractor refresher treining not conducted within required time fame for enrual renewal.
Equipment <i>P roper</i> ty	NL-Operational Process/Procedures Plant Run Out/Slow Down	NL- Bedipmen/Property Damege - Equipment Damege	EquipmentProperty Demoge	NL.Regulatoy Compliance - Non
(1) Root Causa Analysis "Tive Why" Fact Sheet Incident Title Incident Description: MP-2511 seal loss, exused the SRU sour water concentration to actual down. MP-2511 is the only feed pump. Facilitation: JJ Allen Five Why Questions Verification: 1. Why did the "show" happen? Seal using excessive seal oil. Operators got a low few light allers in the control house and downd the lithere was a sexistive seal oil teakage (from the excessive seal oil teakage (from the excessive seal oil teakage and seal of the above" happen? Seal found to have heavy fouling due to contaminated seal oil. JJ Allen 4. Why did the "above" happen? Almosphore seal side seas opened up allowing the excessive seal oil seakage. JJ Allen 3. Why did the "above" happen? Seal found to have heavy fouling due to contaminated seal oil. JJ Allen 4. Why did the "above" happen? Seal oil seal oil system and oil contaminated seal oil. JJ Allen 5. Why did the "above" happen? Seal oil seal oil system and oil system seal oil system and oil system caused the seal components to fall allowing sexcessive seal oil laskage. Easic Cause Category: 2 Basic Cause Category: 3 Basic Cause Category: 2 Basic Cause Category: 3 Ba		(1) Personnol used a different process improve equipment partife, without following PSM process for change. (2) It Personnel did not understand procedure following mercury spits	(1) Bearing failed due to inadequate lubrication level. The Trico oller was not set at the proper height to maintain the correct oil level., (2) No oil tavel hoticating tags	was missed). In fact, he was intentionally disargarding it. Why was no not using the loo?? Because the loot, an Excel spreadshed, was be not roling the loo?? Because the loot, an Excel spreadshed, was sorken. The most recent draining date recorded in the sheet own level a year out of date. The Site Supervisor says he knew there had been a more recent class; that it has sheet conferred enrocateralistics, and that he couldn't rely on the sheet as reimforce froot. How dot the loot become booken? Because the Site Supervisor was not actively working to get the resisting information. There was confusion about whose or separability! these at factions up. Root Cause I dentified as I readequate Communication by the store of the confusion of the store of the store of the complying with training reodure. The communication is trained to rennant renewal, (2) The main problem is that connected on the complying was not conducted within the required time trame to ranual renewal, living was stored and the conductor of the north country of the most reconfusions as the straining assistent of this cow within 1 year of the most reconfusions as the vas not using the seasant set its Supervisor wasn't sure when training was active to the sure? Because he was not using the seasant set the Site Supervisor wasn't sure when training was active to the sure? Because he was not using the seasant was not sure of because the site supervisor wasn't sure when the instaling that was missed; in tao, he was fraining not on the instaling that was missed; in tao, he was fraining not, an Exce

	1	1		·	T	<del></del>
	33760	33712	33859	33631	33827	33514
Richmand,	Richmond, CA - Refinery	Richmond, CA - Refinery	RIChmond, CA - CA - RIChmond, CA - CA - RIChney	Refinery	Richmond, CA - Refinery	Richmond, 3/15/2012 CA - 12:25:00 33514 Refinery PM
3/14/2012 12:00:00	3/17/2012 9:45:00 AM	2/29/2012 5:00:00 PM	3182012 2:00:00	3/14/2012 12:00:00 AM	3/9/2012 4:00.00 PM	3/15/2012 12:25:00 PM
	Closed	Closed	Obsed	Closed	Closed	Closed
Z 2	Loss Near	Near Near	Noor	Near	Loss	Near
Near P&MM Storehouse Main	Failure of the Dispatch Redio Console	RLOP Compliance (CME) Report was inadvertently not mailed by the due date.	Contractor locks (2) Contractor locks (2) Contractor locks (2) Contractor locks by Chavren Fire.	Weter build up on T-634 (Pan Roof Tank) caused roof to lift.	New workbooks stolen	Company car illegally parked in front of cafeteria
Storalbuss notified Procurement Ops Supervisor that the main roll-up door was not working function would not work to raise door). Procurement Ope Supervisor put in an emergency request for repair with the Facility Services was called out to extense repairs. Had wender if come out and assess the situation. Service Order was put in place using the replacement of a similar door as a worse case scenario and basis of estimate for approximately \$14K. Vendor #1 was recommanded by Facility Manager and reforced by Procurement Ops Manager. Based on this emotorseath was not continued to the upgarby of the repair. Storahouse employee suggested we call wander #2 (whose nameplate docs was on door quote. Vendar quote of supports \$2000. By after reporting door wouldn't work, vendor 12 kindled a written quote of approx \$5000. Facility Manager and the procurement of the pro	At appr. 8:00 and 9:45 five Radio consoled in Dispatch had a system faiture or appr. 5 minutes seach time. When the system faiture Dispatch lost 1.0 speckers, GLAT's monitoring, emergency button notification, Community Warning System notification, in house emergency longdown and RFDIRPD communications. The Reintery portable radio system did not loss pelved to pakket communication however as mentioned above the emergency buttons on the paksets would not notify Dispatch during the system failure. After each failure the system roset on the own.		2 contractor locks (JVI & Dresser Rand) needed to be cut of Lote Box #2025 at the TG-800 shut down at Cogen. This needed to be done to creck in steam for the turbine case healing (8 hrs) belone start-up later in the day. Dresser Rand was completed with thorip to 8 forgot to remove their lock. With bad Martix finish their work to a Trursday night which was completed by the ScD operator. Chevron maintenance shutdown supervisor, & myself.	Water build up on the reaf of T-634 (pan reof tank) caused the toof to fit. The water lavel near the gauge well was 2"-3" deep. Reof drain was plugged not allowing water to drain properly.	Boots had be purchased using Employee ledger from Boot Store earlier in the day. Boots hed been stored (in bos) outside locker in readiness to wear for work. When entbyee returned at end of work day to change and take boots home, found boots missing.	Company car Lio #5JUJ888 parked in red zone/crosswalk in front of cafelents
NL-Business Process	NL- Equipment/Property Damage - General Liability	NL-Regulatory Compilance - Non Compilence - Air	NL-Business Process	Nt-Business Process - Business Process	Equipment/Property Damage	NL-Lessons Learned
		(1) 5-Why Near loss-Repon was late. Why-Repon was misplaced. Why-Thate is no tracking system for report status, and no distinct locations for complete folders vs folders to be meifed, including folders due that day.	(1) 5 Why for STG 800 invastigation # 2 1117 What happened when finishing be underlay bid deferred due to mechanics bocks from two different companies were left on the LOTO box from the day shift crews. The bilands were compared at a provinced by a standard by bed compared at a provinced by a standard compared at a provinced by a standard compared at a provinced by a standard convertisment of the bilands were the compared by the bocks were then of the system(s) downstream of the bilands were the control of the system(s) downstream of the bilands in the compared by fine they loted the standard compared by fine they loted the standard compared by fine they loted around was standard by a standard compared by fine they loted around a standard compared by fine they loted the standard compared by fine they loted the standard compared by fine they loted around was planned and executed as a standard compared by fine they loted at a country to binds the standard compared by the standard com		(1) Same action in past had no negative consequences	

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34085	34082	34059	33980	33861	33939	33933	33931	33907	33886	33885	33844
Richmond, CA • Refinery	Richmond, CA - Refinery	Richmond, CA · Refinery	Richmond CA Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond CA - Refinery	Richmond, CA - Refinery	33844 Refinery
3/21/2012 1:35:00 PM	3/21/2012 12:00:00 AM	3/21/2012 12:00:00 AM	3/20/2012 12:00:00 AM	3/20/2012 12:22:00 PM	2/1/2012 12:00:00 AM	2/28/2012 7:00:00 AM	3/12/2012 12:30:00 PM	3/20/2012 2:00:00 AM	3/19/2012 10:00:00 PM	3/16/2012 7:00:00 PM	AM
2	Closed	Clesed	hyssigalion in Progress	Closed	Investigation In Progress	Closed	Closed	Closed	Closed	Closed	Closed
- · · · · · · · · · · · · · · · · · · ·	Coss	Logs	Loss	[0 <b>3</b>	Near	Lost	Near	L Name	Loss	Loss Neg	1088
	Reliner Home page down becauso Danbase saver down (ric841nig3db3)	Extra Work submillal for 25RU T/A: GHG mater inspections	Light off forch and tank exposed to fleme from training prop	K-1070 shukdown on false low pressure suction slarm resulting in the trip of the FCC totalizer.	Contract company AC3 involced incorrect mechanic labor rate.	Green Card, Further cleanup of vegetation needed (ocation; LSFO - SW 563/564	MCP Shet Circuit Protection Setting for MP-8 was set too high.	Seal leak on P-283 (V-283 roller drum pump).	PUL PRD found releasing	Electrically racked in P1129A	Loss Roft-Up Door Repair
BrandEE was in the process of executing a scatticity and due to tight quarters connected at cup extension to the 10° leg before installation. EE these stables that 10° leg with the 1 cup extension at the end of the leg, but the two pleces when 10° leg with the 1 cup extension abcome separated from the leg due to three overhead conduits and les 15 to 6 n statiting the EE on the lets side of his hard hat and head below the ear. The extension is 2° dis pipe, 8 1/2° long and	His Dask received phone calls that the Relinery Home page was not coming up. After investigation by IT goop, it was determined that one of our men database servers, rick-introduction problem. Loss affected the selliny for people to access the Richmond Refinery Wassite. This site is used by the refinery commended that fixed the problem. Loss affected the activity for people to presental to access the del information and fairs. We experience anound 300-300 hits on the website during this simplifarine so estimate that approx. 500 people were effected. Verkesteruid would be that other hyperfinitive were available outside the main refinery webpage. Took 3 IT people about 1.5 hours to determine the search on the reverse Elimated cost to return to business would be \$500 back on their hourly labor costs.	The Inspection of variust flow element 2/2/E3/00 during the 2/5RU T/A was submitted as late, extra work. This flow is being submitted as extra work the sease the CASA ASA2 regulations even sineazed in Doc-2011 which was after the Aug 2011 scope input freeze date. Doing this work is required as part of cur manufacry reporting of Greenhouse Gas and will help to ensure we receive a positive writination from the auditors. Positive verification is critical to our ability to participate in Cap and Trade.	Experienced fire fighter was moving the propane torch tank toward the prop for ignition when the vapors from the prop ignited due to a change in wind direction	K-1070 was running with K-1060 on standby. K-1070 shut down on a low pressure acction alarm 6-9PL050B. It appresss this was a faulting pressure indication. The FCC statistic hipped with no visible flame.	CVX company rep called a Procurement category specialist to worky a mechanic labor rate for contract dompany AGS. The contractor was invoicing for a rate of \$95.00/Hz. However, after the ballegory specialist reviewed the contract it was found that the current contract about rate for a mechanic with AGS was \$70.60 / Hz.	Green Card. Traitic visibility obsturation onto Channel St. from entrance to Swichpgast area from Itatific coming from the scuth. Removed tree vegelation with approval of Chavron Permit Contract Rep. further cleanup of vegelation is needed. Location: LSFO - Switchgeer 583/564, Wast by D&R Flare, LPO Solution # 1782/58	The MCP (Motor Circuit Protector) for MP-8 was act too high during installation (in propody protect the motor. The MCP was found to be left in the "C" sating, which corresponds to a tip value of 1350 Amps. The locked roter current for this motor is 382 Amps, while the full load current is 65 Amps. With the short clicual protection sat this high, there is the risk of damaging the both the motor and motor state in a fault condition. There is also the fisk of un-coordinated protection, causing an MCC dip due to a single motor fault.	Relief pump P-283 seal started leaking. Ops quickly found the source. Pump was isolated and spare pump put in service. Are was washed down and area cleaned up.	Board operator informed the fleed operator to had received a repeat massage for high sump elam at 21 sts. Operator confirmed filting of the sump and for high sump side of the sump and in trace out low releasing sound to a PRO on the PUL line and found it had been relevant to the sump and the Affer tooking it in and composing the PRO to others in the stellon which are set at behavior 200 and 25 fit look the bias setting of 100 PST may have been set too bow. It was installed weeks settler to protect the line and fifter pots at the Sales Racks when the fine is isolehed above 21 stations for work.	P1129A. was sincifically racked out. P1119 had high stop reading. P1129A is space pump for P1199 and P1128. In the sent of loss of P1119, Result would be out feed to 4Crude Unit loss of jet production to J.HT.	repair work, Vendor 2 is a local Richmond business.
	NL-Business Frocess - Business Interruption	Business Process	Nt- Equipment/Property Osmege - Equipment Demego	Environmental	NL-Business Process - Business Process	NL-Lessons Learned	NL- Equipment/Property Demage - Equipment Demage	NL-Environmental - Operational Leak	Operational Process/Procedures	NL-Business Process - Business Process	- Business Process
(1) Installed two connected log sections without tocking linem	(1) Richmond Refrany Wabpage become unavailable whon SQL Server dalabase was unavailable. WHY? Server that runs the SQL Server Database was powered down accidently during electrical work being done in the Uala Cental. WHY? Decument being referenced was nis-reed and person personning electrical work of not realize that the server was connected and in use. WHY? Usually a sean of two perform his work and one least member will verify the work and documentation. Second beam member was unavailable due to a last minute unreated request and raiher than walt for the person, work proceeded. WHY? this type of work had not created a problem in the past, (2) Refinery Webpage should not be lied to SQL Server darbase being available so that it can throtten.	(1) The GHG meter inspections were submitted tate to the 2SRU work scope Why: The regulation change requiring this work to be completed was released in Dec 2011 which was after the scope input freeze date of Aug 2011	1	(1) Why did K-1070 tip off line Because suction pressure dropped below 3 Inch, which is the S/D point Why did the suction pressure drop below 3 Inches Because PT-1050B drift low Because in and a unclaim-indeed faultre.	(1) Contractor did not adhere to their contract labor rates, (2) s Leck of skill or knowledge by supervisor for not following contractor compensation anhadula		(1) NLI: Polantial Damago to MP-8, Why? Motor MCP was set too high. Ythy? Motor MCP selling was not included in EVWO. Why? MCP setting was not determined in a coordination study. Why? Engineer did not know that toordination studies were required for smaller 460V motor installations. Why? Lack of Skill or Knowledge	(1) sod leak on P-283	[1] Falure to comply with Ine MOG process.	s (1) Communication of specific condition. Tag not updated that there was a ground fault after troubleshooting was completed.	

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	34136	34129	34111	34111	34095	34093
	Richmond, Roman	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Reinery	Richmond, CA - Refinery
	1/26/2012 1/20/200	3/21/2012 5:30:00 PN	3/21/2012 4:00:00 PM	3/21/2012 4:00:00 P-M	3/21/2012 9:20:00	3/16/2012 8:00:00 AN
	C	Closed	Ciosed	Closed	Closed	Closed
	Near Coss	Near	Loss	Logs	Loss	Noar Post
	Spare Booster MK-900's motor overheating due to space heaters	Operators personal H2S monitor activated during counds	During taining a firefighter tall discomfort on both knees. Firefighter was one of the instructors for structure firefighting.	During training a frelighter felt discomfort on both kness. Firefighter was one of the instructors for structure firefighting.	Technidan smalled oder while vec menkering.	TP-135 PSV lined before
	An LPO field inspection/audit was conducted on 1/26/2012 at the Hensley St warehouse for the Hydro H2 compressor Spare motor which is being performed on the present condition of the fiscolory creied most that is designated as a spare motor for any of the Hydro H2 condition of the standard engineering practice that is stored motor of this standard engineering practice that is stored motor of this standard engineering practice that is stored motor of this standard engineering practice that is stored motor of this standard engineering practice that is stored motor of this standard engineering practice that is stored motor of this standard engineering practice that is stored motor of this standard engineering practice that is stored motor of this standard engineering the standard engineering engineering the standard engineering engin	The JHT Operator and a Irainoe were out in the JHT pulling samples for the C240 and. Samulog Between the E248's and P24TA when both noticed persons IH28 monthers were gaing off. They lumediately exited the plant and notified the JHO and STL of the starm and the location. The area H2S starms were not activated.	INITIAL DESCRIPTION: SEE LINK ATTACHED IN NIVESTIGATION FOR COMPLETE TOP REPORT Finsighter had very light burns to the top of both moss. More into to follow by M.Ferrer	INITIAL DESCRIPTION: SEE LINK ATTACHED IN INVESTIGATION FOR COMPLETE TOP REPORT Fresignier had very light burns to the top of beth knees. More linio to follow by M Feirer	Technician was manistring VOC at South Isomax Flare Cas Recovery Unit (10 5 pan). He was on the Sixt Ideol of K. 1000 for about three minutes when he smelled light H2S. After a few accords the color got stronger so the Federician then got down from the dock and called his Supervisor. While walking for supervisor the Technician felt sick e.g. spilling and the dry heaves. The supervisor aniveral at the sile and look (sexhibidan into the control house and radified operations of indetent. Technician leaf without the tyle of elect H2S at 10.5 plant. The technicians several H2S at nowled out to unit to try to detect H2S at 10.5 plant. The technicians several H2S exposited may reading to perations operators who went out to datect H2S dish not get any readings. Operations called Charcro's EM1 to the control house to assess Technician service and several readings of technician services of the charter o	Ops started TP-195 after maintenance was completed. The pump would not come up to normal operating discharge pressure. And the pump low pressure alarm would not door. Mit was celled to chack the pump. Mit notleed the PSV on the pump discharge had filted dwelling flow to the reservoir. The pump was studiown and restarted. The PSV reset the pump was left on line. One hour later the low pressure alarm sounded on the DCS Ops found the PSV had lifted.
	NL. RepipmenuProperty Dannage - Equipment	NL-Operational Process/Procedures - Sefety Systems	NL-Injury/Illness - Employee Injury	ใญ่นารกใกธรร	hjurydinoss	NL- Equipment/Property Demeye - Equipment Demeye
(1) 1. VMy? – internal spring is broken and the bellows is holded through fivenified through inspection) 2. VMy? – unknown (possibilities below including action items to prove rightwork) a. Bellows and spring material incompatible with process conditions – materials angineers verified bellows made from adequate material for process conditions b. One time large event (process pressure spice) ruptured bellows and broke into spring – not firedly, but cannot varify as there is no pressure gaege that records date on C-140. Trends off of V-141 which is past E-140 contensors shows a time	(1) Why was the crated box warm to the touch, the factory plastic coverling of the motor was very soft and varying in oppearence, and having a mild board plastic smell/dorf to IP. The space healing was designed for 480-volt power but showed up with 120-volt and team decided to hock up 480-volt anyways. Why did the learn hock up 480-volt anyways. Why did the learn hock up 480-volt power would racker young healing would be produced by 120-volt gover the same of 120-volt gover would not be enough healing would be produced by 120-volt power based on the size of the motor and were the not enough teaching would be produced by 120-volt power based on the size of the motor and were forced and factor of skill snot knowledge. 1) Project team reminer of nought more that would be toolter and expliced a higher ovilage them recommended why 17.2) Incl. on a state of the motor source and did not actuable effects? Lack of skill and reconstituted why 17.2) Incl. on state of the reconstituted why 17.2 Incl. on state of the reconstituted and papersonce on stronge of such large magnitude asset and not consulting factory or engineering SME's		(1) Body position/knees ware not rotated frequently enough during structure fire to recreate eir gaps between skin and clothing. (2) Firelighter was aware of potential hotter areas of room and where to position threself but was focused on monitoring students as a sefety officer.	(1) Body position/knees were not related frequently enough during structure fire to recreate air gaps between skin and clothing. 2) Frierighter was aware of potential hottor areas of room and where to position thressi but was focused on monitoring students as a actity officer.	(1) Tochnician smallad H2S and made him nausagus.	(1) PSV Iffied before set pressure

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	34345	34343	34339	34285	34284	34284	34.245	34245
Richmond, CA -	Richmond, CA - Refinery	Richmond CA - Refinery	Richmond CA -	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond,	Richmond CA -
2/27/2012 1:47:00	2/27/2012 1:47:00 PM	2/21/2012 9:30:00 AM	3/22/2012 13/22/2012 PM	3/25/2012 8:10:00 AM	3/25/2012 8:20:00 AM	3/25/2012 8:20:00 AM	3232012 AM	3/23/2012 7:00:00
	Closed	Closed	Closed	Closed	Closed	Closed	Chased	Closed
Near	Near	Near Loss	Logs	Near	Near Loss	Near	[0	0
X G			<u> </u>				1	·
Green Card, Stop sign knocked over, Location:	Green Card. Step sign knocked over, Location; Comer of Milis/Main St.	Green Card. A mechanic had no earplugs, Lecation: TKC R-410/R-411	Vehicle hit guard rall while backing up.	18.8 KV voltage dip during planned T-2000 S/D.	S-6 Last security keys after opening 119 gate	S-5 Lost security keys after opening 119 gate	The PRD on C-140 (IX- 121) has a macherical Isave and is leaking by to lefer.	The PRD on C-140 (IX- 1721) has a mechanical Issue and is leaking by to relient.
Green Card. A stop sign is knocked over, Location: Comer of Mills Street and	Green Card. A slop sign is knacked over, Location: Corner of Hills Street and Main Street.	Green Card. Observed 2 mechanics working on nearby equipment with a steam plum in the same sizes. One mechanic had earphigs and the other mechanic had notes. Location. TKG R-410#7-411	Vehicle contect with guard reli. While backing up a CVX truck, on a un-remed dir road in the lank field, vehicle contacted guard reli with Right front bumper and plastic yim on the side of bumber/wheel well, forward of front wheel. EE sides; "whist backing, considering the stability of the ground with the recent rain, I backed to a stop, I decided to high the guard rain more closely. Reavuring if his back up, I hugged the guard rain to consely that I heard friction, i stopped. The table to the middle that the content plant of the truck was clear. The front section apparent close, so I pulled forward to selely stop and rispect the vehicle, suspecting demays to the underceriege. I saw scretches on the passenger side protector deve front wheelt. The guard rail head the same material microtring the scratch marks. I then reported the mishap to my Suppovisor	13.8 kilovoli bus voltage dipped to 12.9 kilovolis during a planned shut down of Trein-2000 Cogeneration Unit.	While opening 118 gate S-6 km keys in lock and left the area	While opening 119 gate S-5 teft keys to took and teft the area	The PRD on C-140 (IX-121) has a mechanical issue and is leaking by to refet. It also sent in to have a leak on the medianide of the internals that was leaking to almospers that have a feel on the PRD body. To replace the PRD til a geing to take a full SDA shutdown.	The PRD on C-140 (IX-121) has a mechanical issue and is leaking by to relief, it also seems to have a test on the refer side of the internet that was leaking to almost per through a wheep had on the PRD body. To replace the PRD It is going to take a full SDA shutdown.
NL-Transportation -	NL-Transportation - Contractor	NL-injury/Illness - Employee injury	Transportation	Nt-Operationat Process/Procedures - Safe Operating Limit (SDL) Exceeded	NL-Security - Property Loss or Theft - Physical Property	NL-Regulatory Compliance - Non Compliance	Operational Process/Procedures	Environmental
			(1) Driver could not see right front side of bumper from driver seak	(f) Lack of TAP changer understand	(1) Forgatidness. Supervisor cleared gate that normally cleases that faultomatically sifer connects depaths. Supervisor had could coding Gate. He latid down keys and lock to manually close gails and dopol to re-secure gate with Y-took and Jeff He supporvisor's keys allected to the V-took.	(1) Fonglittness, Supervisor closed gate that normally dosess itself automatically after consense departs, Supervisor had trouble closing Gate, He faild down keys and lock to manually close gate and longs to re-secure gate with W-lock and Jeff its supervisor's Asy's alleated to the W-lock of the W-lock and Jeff its supervisor's Asy's alleated to the W-lock and	(1) 1. Vmy? — internal sparing is broken and the believer is boiled through (earlied imorage hands). 2. Why? — unknown (possibilities below including sotion items to prove inphi/wroxp) a. Ballows and spring maistrial incompable with process conditions—maistrial angieners verified belows made from adequate malerial for process conditions b. One time large event (process) prosure spilely public de line) of the spring—not likely, but cannot verify as there is no pressure gauge that records date on C-14-0. Trends off of V-141 which is past is-140 condenses shows a time corresponding spile, but if it is not abnormal compared to including unusual pressure entanges in V-141. "Here is no data conditions of the spring and belows fellows excluded the conditions of the spring and belows fellows cannot wriffy this due to leak of conditions and pressure antique to include with the conditions of the spring and belows fellows. Cennot verify this due to leak of pressure gauge that records date on C-140. Continuous PRO use counces with the rowerse case (a large number of low stress cycles, such as with Challering of whitefurs). Openition of the PRO at a pressure within-10 or whereins, openition of the probation of the prince of the self-pressure can cause challering, which leads to openition of the self-pressure can cause challering, which leads to openition of the probation of the prince of the self-pressure can cause challering, which leads to openition of the prince of the self-pressure can cause challering of whereins.) Openition of the prince of the self-pressure can cause challering of whereins openition of the prince of the self-pressure can cause challering of the self-pressure challering of the self-pressure can cause challering of the pressure can cause challering.	corresponding spike, but it is not abnormal compared to normal pressure changes in V.4.4 1 It was it is no dala normal pressure spikes or swings in the system c. Confinous PRD use — can cause vibration which could lead to spring and believes failure. Centhal tenity his due to lack of pressure gauge that records data on C-14D. Confinuous PRD use could definitely lead to the beliows failure over with the LCF grade of inco 625. LCF has resistance to a small number of high stress cycles, but not encessarily the inverse crease (a tigge number of low stress cycles, such as with challeting or what force). Open all pressure can cause challeting, Open allow of the pressure can cause challeting, which leads to open days the pressure can cause challeting, which leads to open days the pressure can cause challeting, which leads to open days the pressure can cause challeting, which leads to open days the control of the set pressure can cause challeting, which leads to open days the can be set pressure can cause challeting.

	NL-Transportation • Contractor	Green Card. A stop sign is down at Bridge 166. The wind blew it down.	Green Card. A stop sign is down. Location: Bridge 166	Near Loss	012 Closed	nd, 3/14/2012 9:15:00 / AM	Richmond, CA- 1 Refinery	34371
	NL-Transportation - Company	Green Gerd. A stop sign is down at Bridge 166. The wind blew it down.	Green Card, A stop sign is down. Location: Bridge 168	Near Loss	012 0 Closed	nd, 3/14/2012 9:15:00 / AM	Richmond CA- 11 Refinery	34371
The state of the s	NL-Lessons Learned	Green Card, Bubbles are coming up from the ground between Timec Tool Trailor and Safety Geer Trailor, Location: Gate \$1	Green Card, Bubbles coming up from ground. Location: Gate 91, Timec/Safety Traiter	Near Loss	012 00 Closed	nd 3/14/2012 10:00:00 / AM	Richmond, CA - 10 Refinery	34370
	NL-Transportation - Confractor	Green Card. A stop eign is down again at Niji St. and Zerolene St.	Green Card. A stop sign is down. Location: Mill SVZerolene St.	Near Loss	012 Closed	nd, 3/14/2012 8:00:00 / AM	Richmond CA - Refinery	34369
	Nt-Transportation - Company	Green Card. A stop sign is down again at Mill St. and Zerolene St.	Green Card. A stop sign is down. Location; Mill St/Zerolene St.	Ngar Loss	012 Closed	nd, 3/14/2012 8:00:00 / AM	Richmond CA - Refinery	34369
	NtTransportation - Contractor	Green Card. There were a lot of posted signs (wind, speed, direction, no pathing signs) blown over from the wind. Location: Gate 51 Parking Lot	Green Card. Posted signs blown over. Location: Gala 91 parking lot	Near Loss	012 Closed	nd. 3/13/2012 5:00:00 / AM	Richmond CA - B Refinery	34368
	NL-Injury/Illness - Contractor Injury	Grean Card. The weshdown station at K-910 needs to be fixed because of a steam back near walkway. It looks very unsate with light walkways. Lecation: S. Isonax K-910	Green Card. A steem leak near waikway. Location: SISO K-910	Near	012 Closed	. ~	Richmond CA - Refinery	34367
	NL-injury/litness - Employee injury	Grean Card. An overhead steam leak behind insufation needs to be fixed because a lot of condensate is failing down in wakways. Location. S. Isomex K-960.	Green Card. An overhead steam leak, Location: SISO K-950	Near	012 G Closed	nd, 3/12/2012 8:30:00 / AM	Richmond CA - Refinery	34365
	NL-Environmental • Operational Leak	Green Card, Found a lask on small manway and it looks like we need to change out the gasket Location: D&R NHT $V\!-\!457$	Green Card, Leak on small manway, Location: D&R NHT V-457	Near	12 Closed	nd. 3/8/2012 7:15:00 / AM	Richmond, CA - Refinery	34363
	NL-Environmente) - Operational Leak		Green Card, Steam leak. Localion: SISO - E-944	Near	00 Closed	<u> </u>	Richmend CA - S2 Refinery	34362
	NL-injury/ilinass - Confractor fajury	Grenn Card. A 3/4 tubling came off and (eaking out a lot of steem. It's under 2 steps steir just North of K-950. Location: S. Isomax, , North of K-950	Green Card. A steam leak. Location: SISO - K-950	Non	Clased	nd, 3/7/2012 2:30:00 PM	Richmond CA - Refinery	34380
	NL-Environmental - Operational Lask	Grann Card. MP-495 - A chrick valve leak behind insulation. Cannol see whal side it's leaking from, it might be an outlet needs to be fixed. Lots of condensets on walkway. Localion: OSR NHT MP-485	Green Card. A check valve look behind insulation. Location: D&R NHT MP-495	Naar Loss	Closed	nd, 346/2012 2:30:00 / PM	Alchmend, CA. Se Refinery	34359
	NL-Lessons Learned	Green Card. A drain next to V-481 is plugged and needs to be unplugged because the pleasand walkways are covered with water.	Green Card. A drain next to V-461 is plugged. Location: D&R HHT V-461	Near Less	Closed	nd, 3/6/2012 9:00:00 / AM	Richmond CA- Refinery	34357
	Nt-injury/liness - Employee injury	Green Card. A big steam leak on stainway needs to be fixed soon because it is In the walkway and someone can get burned by not condensate falling on their head. Location: S. Isomax, behind the NISO Control Room.	Green Card. A big steam leak on stairway. Lecation: SISO • behind NISO control m	Near	12 00 Closed	4d, 3/2/2012 12:00:00 7 PM	Richmond, CA - Refinery	34356
	Nt-Injury/Illness - Contractor Injury	Grean Card. A very bad tissm leak under the deck on K-840 needs to be fixed because it is hard towalk on the deck white steam blows everywhere, Localion: S. Isomark K-940	Green Cord. A very bad steam leak under the deck. Location: SISO K-940	Near Loss	O Closed	nd, 3/1/2012 9:00:00 / AM	Richmond, CA - Refinery	34354
	Nt-injury/Illness - Employee injury	b site with tots of steem leaks in area slugs, Location; S. Isomax D-252C	Green Card, Lois of steam teaks in area, Lecation: SISO • D252C	Noar Loss	012 O Closed	nd. 22772012 1:00:00 / PM	Richmend CA- S2 Refinery	34352
	NL-Injury/Ilfness - Contractor Injury	Green Card. As I walk out of Control Room and try to walk to the job site, I could not walk in the walkway because a steam leak makes it hard to see walkway. Location: 3. I stonars TP-200A.	Green Card, A steam leak needs to be repaired. Location, SISO - TP360A	Naar Loss	012 O Closed	nd, 2/27/2012 7:15:00 7 AM	Richmond, CA - Refinery	34350
	NL-injuryiliness - Employee injury	Green Cerd. A big overhead steam leak reeds to be fixed because a lot of hot condensate lats down on walkway and it creates a lake, Location: S. isomax, West of V-830	Green Card. A big overhead steam teak needs to be fixed. Location: SISO - W.of V- 830	Near Less	012 0 Closed	nd, 2/27/2012 1:30:00 y PM	Richmond, CA - CR Refinery	34347
Account	NL-frjurylliness - Contractor injury	Grean Card. A big overhead steam leak reads to be fixed because a lot of hot condensate falls down on walkwey and it creates a lake. Location: S. isomax, West of V-830	Gresn Card. A big overhead steam leak needs to be fixed. Localion: SISO - W.of V- 830	Near Loss	012 0 Closed	nd, 2/27/2012 1:30:00 y PM	Richmend, CA - CA Refinery	34347
	Company	Main Street.	Comer of Mills/Main St	Loss	Closed	PM	34345 Refinery	343

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	34746	34731	34654	34645	34594	34520	34507	34374	34372
CA -	Richmond. CA · Resinery	Richmond, CA - Refinery	Richmond. CA - Refinery	Richmond, CA - Refinery	Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	
3/29/2012 9:00:00	3/29/2012 6:30:00 AM	3/28/2012 9:30:00 AM	3/23/2012 8:00:00 AM	3/27/2012 10:00:00 AM	3/25/2012 3,45:00 PM	3/8/2012 12:00:00 PM	3/27/2012 11:00:00 AM	3/22/2012 2:30:00 PM	Richmond, 3/18/2012 CA - 7:30:00 Refinery AM
	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Clased	Closed
N ear	Near Loss	Loss	5	Loss	Near	Loss:	Loss	Los a	Near Loss
Near DPR needed additional	Tipped over small confeiner of Sulfuric Acid	Green Card, Delivery frucks making dangerous turns. Location: Intersection of Richmond Pkwy/Gate 31	Comaphy Venicle damage/sloken leptop and phone	The access key to the barrel lock on the of the 124 control bux bruke oif in the lock. This control box is the unit which houses the motor assembly for the inbound vehicle gale #124.	Transfield, accidental discharge of air hom	Oblays in execution of TP- 264 work	Boller # 5 tripped off-ine and 105MLE/H of steam was loss	Green Card. Instrumentation line broke off. Location: 4 Crude, Next to E-1 195A	Green Card, Barkling around TK3102 has come apart, Location: 3102 Tank
BPR required special power, and it was not adequality conveyed to the Planning and Scheduling group when the generaces were ordered and permits pulled. Power was procured at last moment, but possibility of the necessity of rescribeduling the BPR if power was not available and all the coals associated	While operator was performing the task of changing out the bottle for the temporary sulferic acid drainage system, the container lipped over and spilled - 1 cup of suffund acid into the drainage system.	Green Card. Chevron delivery fucks traveling down Richmond Plwy make a wide right turn as they enter the street leading to Gate 31. Both times to winessed, scared for my life, as the funds missed hitting and injuring/fulling us as we were traveling in a Chevron car. This is a major safety issue which seems or faller might injure or kill someone. Location: Intersection of Richmond Plwy/Bate 31.	Company which was perked off sile, Rear passenger window and company laptop computer and phone were stolen.	The access key to the barrel tock on top of the 124 control box broke off in the lock. This control box is the unit which houses the motor assembly for the inbound vehicle gate #124.	Transfield, EE while cambing a fadder, brushed an obstruction with his back pack activating his air horn. This caused a cold sensesion to a spot on his back.	1.Week of 227 schaduled TP.264 for instell in the field with pickers for Wed., however not set to be complete at the shop till Wed. attennoon. Z.Pickers schedule was full on Thursday	Goller & Sipped off-line and 10EM, EPH of steem was loss. Mistres (X-rey) craw was scheduled to x-rey FCG pipping at \$6 Boller. The switch labeled Eciler Epass" was advanted and not the Flame scanner by pass switch. Mistres set up and processed to x-rey and when they started, \$5 beller tripped off-line.	Green Card. 1/2 instrumentation thre troke off henger. It's laying in pipeway connected at other and causing a tripping hazard and head knocker. Location: 4 Crude, Next to E-1105A	Green Card. The banding on TK3102 has come epart above sampling platform, it needs to be repaired. Location: Tank Field Bts, 3102 Tank
	NL-Environmental - Spill	NL-Transportation - Company	Equipment/Property Damage	Equipmen/Property Demege	NL-injuryfiliness - Contractor injury	Bushess Process	Operational Process/Procedures	NL-Injury/ttness - Contractor injury	NL-Lossons Learned
(1) 5 Why Investigation The crew was asked to install equipment for the Business Pien Rollout that was not adoquate for the needs of the wordor. I Chew installed the electrical equipment request on the wordor. I have installed the electrical equipment request on the wordor and the request was incorred. 2 Why did 1 happen? Work equast did not include the information from wordor an power receds for event sent to swent coordinator. 3. Why did 2 happen? The event coordinator call the sectical shops supervisor to discuss power to the care, he inought the power needs would be the same as other event, because no other information, was provided to him Root Cause There was not adequate information to the first market the Sketch on the permit equast and the wife him Root Cause There was not produced to the plantages on the City inspector shuddown the power to the Business Plan Rollout, because the equipment was not produced by lite generators main breaker. The wire that the vendor supplied was to small for the generator was not produced by lite generators main breaker. The wire that the vendor souther dort their equipment was too small for the main breaker on the larger size generator, and the crew did not supply a prollegive device between the generator words and the wire foot Cause The cover did not have the equipment to protect the wire.	(1) Design		(1) Public Affairs team member let company laptop and Phopa on the sead of his company letted cor while he went into a store, He judged that strice he was going to be in the store for less than 15 minutes, that it was a busy intersection and early in the months, that he sisk of their was low.	(1) The key brake off into the lock because the lock was a little silicky. The lock was sitchy because it hasni been manisined in a while. It hasni been manisined because it is not used often.		(1) Pickers scheduled for Wed, however furbine not scheduled to be complete at shop till Yed, Afternoon, a. Scheduler scheduled the work believing that the job would be done at noon Wed, and that was the orly lime the picker would be available. b. Shop initially advortized noon as a time to be complete c. Scheduler did not receive information from shop that the furbine would not be complete till Wed, and of stiff, use of communication on ETC when not all of the information had been analyzed to determine an accurate ETC	(1) Switchs on BMSS Panel labeling caused confusion., (2) Check list PPLC4528 should be a procedure for critical tasks.		

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	34988	34 <u>98</u> 8	34860	34860	3 4 8 3 3 4 8 3 3 4 8 3 3 4 8 3 3 4 8 3 3 4 8 3 3 4 8 3 3 4 8 3 3 4 8 3 3 4 8 3 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 4 8 3 4 4 8 3 4 4 8 3 4 4 4 4	34779	34778	34773	34764
Richmond	Richmond, CA - Refinery	Richmond, CA - Rofinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmand,	Richmond, CA - Refinery	Richmond, CA Refinery	Richmond, CA - Refinery	34764 Refinery
Richmond, 4/1/2012	3/31/2012 2:30:00	3/31/2012 2:30:00 AM	3/30/2012 8:30:00 AM	3/30/2012 8:30:00 AM	3/21/2012 12:00:00	3/29/2012 11:45:00 AM	3/29/2012 11:45:00 AM	3/29/2012 11:00:00 AM	AM
	Cossed	Cloan	Closed	Closed	Chosed	Closed	Closed	Closed	Closed
	Loss	Loss	Coss	Loss Near	Near Coss	Near Loss	Near Loss	Near	Loss
	During start up of C-100 Module, lifted PRD safely.	During start up of C-100 Module, Meed PRD safety.	Unachadulad delivary of exchanger bundle	Unscheduled deliyary of exchanger bundle	Privale Data Lett in Control Confernce Room	H2S Exposure, unknown source. (14 ppm exposure)		Green Card. EE discovered a can of leaking denatured alcohol. Location: Electric Shop	power
Al 3:50 FCC totalizer trip at 208SCF-This was due to Feed in On SDA module. 30 mins effor feed in pressure increased in C-140. To provent a PSV triing. The outside operator celled in to say he was opening the PSV bypass. The PSV bypass was open and pressure was turned at 50 bits. The safety lifts at 65Lbs. A second compressor was started but was not quick enough to turn the pressure and prevent the trip. Further investigation of the problem Found 2	Relief for C-140 had been replaced White preparing to startup C-100 Mod., the PRD start litting again and some leakage from the bellows was observed.	Relief for C-140 had been replaced White preparing to startup C-100 Mod., the PRD start triting again and some leakage from the believe was observed.	INITAL DESCRIPTION: SEE LINK ATTACHED IN INVESTIGATION FOR COMPLETE TOP REPORT. Unschaduled delivery of exchanges foundle on Filday white limited equipment and slaff are available to support. So there was not appropriate personnel and equipment ready to officed it. The bundle was officeded using a forklift. Bundle was approximately 14000 lps, and valued ever \$200,000, Oxfanelly, a cane and rigging are involved in the officacing of material of this nature.	INITIAL DESCRIPTION: SEE LINK ATTACHED IN INVESTIGATION FOR COMPLETE TOP REPORT. Unschaduled delivery of exchanger bundle on Friday when initiate actionment and staff are available to support. So there was not appropriate personnel and equipment ready to officed it. The bundle was officeded using a toxitiff. Bundle was approximately 14000 ibs. and valued at over \$200,000, Oxidhaitiy, a cane and rigging are involved in the officeding of malerial of this nature.	Privale data from a management meeting was placed on chair next to computer/presenter table. Was not collected upon leaving meeting. Data was discovered on 3/26 and returned to owner.	While working in a shallow excavation, a workers personal H2S monitor alarmed.		Green Card. Employee discovered a one gallon can of denatured alcohol in the point-of-use area of the cage which had been savered youtshed and was leeking. The can appears to have been crushed during silignant. Leaking alcohol presents a possible fire hazard. Location: Electric Shop	constituted the near-loss
	Environmental	Operational Process/Procedures	NL-Business Process - Abnormal Freight	NL-Business Process - Business Process	NL-Business Process	NL-Envirormental - Release	NL-injury/likaess - Contractor injury	Nt-Esvironmentel - Spill	NL-Lessons Learned
(1) Fcc totalizer trippaddo to flow from C-140 PSV bypass during SDA 100 module startup. Why was PSV IBypass opened? Psv Bypass was opened due to increasing pressure on C-140. Why was there increasing pressure On C-140? Increasing pressure On C-140? and pressure on C-140? and E-140. Why were there 2 pluged passes on E-140. Why were there 2 pluged passes on E-140.	(1) Overpressured C140 lifted PRD – bellows felied Why – nortesting pressure in C140 Why – Increasing pressure on C140 was due to 2 plugged passes on E-140 Why – modified startup procedure called for not flushing system with DAO to facilitate a quicker startup after PSV replacediment. (2) Possible NZ purgs left in to, but looking at trends (attached to inclident checklist) pressure had dropped to 6.8 PSI prior to starting DAO from C130 to C140. If NZ was left in it could have only basin a slight purge. Need to be 100% sure step in procedure is complete before signing off.	(1) Overpressured C140 lifed PRD – bellows falled Why – increasing pressure in C140 why – increasing pressure on C140 was due to 2 plugged passes on E-140 Why – modified startup procedure called for not flushing system with DAO to facilitate a quickor startup after PSV replacedment. (2) possible NZ purge left in to, but looking at trends (attached to incident checkist) pressure had dropped to 6.8 PSI prior to starting DAO from C130 to C140. If NZ was left in it could have only been a slight purge. Need to be 100% sure step in procedure is complete before signing off.	(1) Unscheduled delivery of Exchanger Bundle by outside company, (2) Some employees used stop work authority s because they were unaware that 10-Ton Forklift Can be Used to Safely Unioad Bundle	(1) Unschodulad dolivery of Exchanger Bundle by outside company, (2) Some employees used stop work authority a because they were unaware that 10-Ton Ferkitt Cen be Used to Safely Unload Bundle	(1) FIVE WAY'S 1. Why did above happen? Varification individual did not review workspace appropriately and interoughly before teaving the conference room. 2. Why did "I" happen? Individual seviewed workspace and conference table before leaving but did not look in chair behind whore sitting as chair is not normally used to hold data. 3. Why did 2" happen? Used chair to hold slides as workspace where computer was did not allow enough room to hold required materials and allow appear to take notes. 4. Why did "a happen? Fired kinne in this conference room conducting this type of meeting where taking notes, actions, etc is required. Normally in 3 to where taking notes, actions, etc is required. Normally in 3 to where taking notes, actions, etc is required. Normally in 3 to where taking notes, actions, etc is required. Normally in 3 to where workspace is adequate at computer desk. 5. Why did "4" happen? Awarteness when placing the documents on the chair that there was ask of forgeting them since not part of normal processes. Thought to make a note to remind my set but did not, nonceased with meeting believing I would not forgat. ROOT CAUSE: What was the Root Cause so your incident? Recognized risk, thought about actions to remove risk but did not a tal upon it. LPS Factor. B	(1) H2S release	(1) H2S reloase		NL-Lessons Learned aquire correct equipment

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	35133	35127	95100	35073	35066	35022	36017	34932
	Richmend, CA - Refinery	Richmond CA - Refinery	Richmend CA-	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Rasinery	Richmend, CA - Refinery	CA - 34932 Refinery
	4/3/2012 1:00:00 PM	3/30/2012 11:46:00 AM	4012012 11238:00	4/2/2012 6:00:00 PM	4/3/2012 1:50:00 AM	4/2/2012 11:15:00 AM	3/26/2012 9:00:00 AM	3:00:00 PM
	Closed	Closed	Ciored	Closed	Clased	Cosed	Closed	Closed
	Near Loss	Neer Loss	- Knog	Logg	Near	Coss	Near Loss	5
	jumping off dock down at the counter	Green Card. Smoke sterm sounded after using basster. Location: Admin Bidg		Pipelines at 21 Pump Station shuldown due to manpower shortage	Severe water hammer on 15 lb. steam line inside #1 Power Plant	K-920 Unplened shuldown	Green Card, Blind comer while walking, Location: Admin Bidg	FCC totalizer trip on SDA 100 module startup
On 3/6/12 at approximately 1215 the PCN Backup Server lost connection to the PCN Storage Ares Network (SAN) UN thet is tocated on SATABEAST 02. This HA mass storage until to configured as a logical citive on the PCN Backup	I was walking from the mach,shop when I saw a person jumping off the dock, I yelled for the person, to stop but was to lete. No injury to the person.	Grean Card. Smoke alarm sounded in the Admin Bidg. I was loasting a bagel choses and wich on the 4th floor. About a 1/2 minute after removing from loaster, the alarm sounded. Locaton: Admin Bidg. 4th fir.	EPLCG (Hwy 12) became Isolaled causing loss of view to K1420	The pipelines at 21 Pump Station (BAPL & KM3) were shutdown for nightishift 4/2 due to lack of manipower (mulliple EE absence) requiring the Relined Head Operator to have to work the SP Hill Job.	The 15 ib. steam header (approx 100') from #1 & #2 flash tanks and almospheric lanks was moved vertically approx 4 - 6 inched & horizontally approx 6 - 8 inches due to severe water harmonr.	During project to install trabon oil system the contractor electricians inadvactently turned a lever causing the commonssor to shut down. The electricians flought the lever was the hande to open the control box.	Green Card. As I was approaching a skar ponner on the second floor of the Admin body, ih-and flootelaps approaching, I stowed down to ensure I would not run into the approaching person. The parson rounded the corner with a full output of other in turns, saw me and stopped quickly. A large portion of the coffee was spilled, tuckly, not not either one of us.	passes of E-140's were plugged. Those fin fan exchangers Control C-140 pressure and were flushed the night before.
	Nt-Injury/Illness - Contractor Injury	NL-Fire/Explosion	NL-Business Process - Publiness	Business Process	NL-Business Process - Business Process	Operational Process/Procedures	NL-Lessons Learned	Operational Process/Procedures
			3 T T T T T T T T T T T T T T T T T T T	(1) -This incident occurred because current Absence Control Policy needs revision to improve accountability. (2) Deterred hiring of Operators	(1) Steam traps are left cold if not discovered by operators. The list of cold traps is not rescribed unless a Maximo Work services it is not cold traps to not rescribed on the colours it is not colours. If not colours we only resolve the top 20% of those that are bad order.	(I) K-250 that drawn when the contracted descritizans opened the back left dear of the central panel. This caused a interruption in control power which tipediapaned the preskortsianier. WHY The control panels have a vary old system consisting of bose which and established which a characts. WHY. They are not prosontly included in a PM program. WHY. This yard of interruption was not endicipated before. WHY. Work direction had been handled this way in the past and no incident had occurred. There was a verbal equals to not work in the panels until a cultover was planed. This was a presention to avoid opening of the panels. The figures was a presention to avoid opening of the panels. The figures was a presention to avoid opening of the panels.		Modified Startup proceedure called for not flushing system with DAO to facilitate a quicker starup after PSV replacement.

Richmond, 4/8/2012 CA - 2:20:00 35353 Refnery PM	Richmend, 4/2/2012 CA - 2:20:00 35353 Refinery PM	Richmond, 4/2/2012 CA- 12/00:00 35273 Refringy AM	Richmend, 4/5/2012 CA - 0:C0:00 35269 Refinery AM	Richmend, 4/4/2012 Richmend, 4/4/2012 CA - 12:00:00	Richmend 4442012 CA - 7:00:00	8/chmond, 3/6/2012 CA- 12:15:00
12 Closed	12 Closed	112 Closed	0 Closed	112 00 Closed	012 Closed	12 Closed
Loss	Loss	Z-baar	Near	Loss	Lo ss	LOSS R
Firefighter injured during training	Firefighter injured during training	2 overdue PRDs in 8 plant	Hydrocarbon on ground at TEL injection facility	Sulfde Cautic leaked from a vectum truck staged eveningst at the NYCP. The fruck was staged at the pad due to presence of hydrocarbon coaled an incompatability with the poly tank designated as the off load location.	HAVA	Backup Task for PCN APProdus for System or recovery failed validation
During training, firefighter climbed over parapet in preparation for a rope repet. Firefighter grasped the parapet with both hands, then swung his body over to get into position for rope. Before the firefighter released arms from wall, a "pop" was felt in right shoulder, causing discomfort.	During trailing, firelighter climbed over parapet in preparation for a repe repet. Firefighter greated the parapet with both hands, then award his body over to got into position for repet. Battors the firefighter released arms from wait, a "pop" was fell in right shoulder, causing discomfort.	PRDs IX-2502 and IX-2504 are overdue to tosting		A veculim Iruck containing sulfidic causitic, removed from V1936, was staged overright at the North Yard Chem Pad. The truck was staged at the chamical pad because the material in la truck did not match the description on the 3131 and the presence of hydrocarbon created an incompatability with the position of the staged so that the official discultion. The truck and metantiel was staged so that on official plan and location could be viorited out the next day. On April 04 at 05:00 mm as utilitied causitic test was discovered by Yeolia. An estimated 30 gallons of material tested into comerited secondary containment of the NYCP.	I received a phone call from RTD this monthing informing me that we had a new fruck on toan to us for the last couple of weeks and it was returned to RTD yesterday with a dent in the passenger side door, the one on crew reported damage to aupenvisor. No one reported being involved in an MVA. Truck was parked in back of ship during of shift hours with key in sprillon.	imposition yand is available for authorized PCN users to manage their production System Image files. It was during this time that an ON-Denman menualty configured Acronis backup of the SRU APProde (CN Node S) was being conducted. This particular AppNode is designated for receiving the OPC anvironmental values generated at SRU. This backup notentisting was part of the PCN Acronistists; LPSA, back-out plan, pror to implementing a scheduled communication switch upgrade pridect. At the time of the incident, the backup take that after a completion and was in its final etages of execution; the suitably take that after a completion and was in its final etages of execution; the suitably was that after a completion and was in its final etages of execution; the suitably was discovered that the storage was no longer evaluable. During this time, it was discovered that the storage was no longer evaluable. During this time, it could not be accordanced if the image file generated could be used to positionly secones the system from an unexpected software malfunction that the Control System Analysts were expenietized, After the loss of connectivity, the storage is was unevaluable. The total unplanned cutege isates excuse the image file was unevaluable. The total unplanned cutege isates approximately 3 hours.
Nt-injuryillmas -	ใก)ันเวสให้คอรร	NL-Operational ProposseProcedures Pressure Relief Devices (PRD)	NL-Environmental • Spill	Environnantal	Equipment/Proporty	NL. Business Process
(1) Been awhile since firefighler performed skill	(1) Been awhile since frefighlar performed skill	(1) Why did PRDs so overdue - mainhanance was delayed in planning and scheduling the replacement. Why - maintenance was not aware that the PRD replacement to doubt be completed On the ran, Why - PRDs were marked as not available on the rain in Marietam and feedback was not siven to mainhanance that the PRDs were indeed available on the run. Why - tack of clear communication to operations prevented complete understanding of information needbed for maintenance on "not - available OTR" PRDs Why - there was not one person/position assigned to track completion of PRDs tabeled as "not available OTR"		(1) Why did the vacuum truck develop a leak over night? There was an aluminum cambok cep placed over the 4" Inlet valve cambok litting - when sepased to exulsio over a prolonged period, the eluminum degraded leading to leak-by. May was an aluminum cap in use? The little role is not used at the Richmond refinery, all vacuuming and of-leading is done brough the outlet valve. The fitting appeared to be of carbon sleel construction. Why hadn't the filling been amoved to see if it in factives carbon steel? There was not a system in place to other kir metalsturg of that filling.	(1) 6 Why invostigation Electric shop was having one of its pick-up trucks serviced. White the truck was being serviced a boarrof truck was being serviced a boarrof truck was provided. When the loaner truck was termed it was rot reported to the electric exhop supervisor. (1) Why was the AMA not reported to supervisor? Employee stated he teared that reporting the MAA would compromise his amployment. 2) Why did employee lear reporting the MAA would compromise his amployment. 2) Why did employee the recently returned to work after being away for over a year. (2) 5 Why investigation Employee reported vehicle involved in an AMA. 1) Why was the welfcle involved in an AMA (2) Why was the welfcle involved in an AMA (2) Why was the welfcle frouted in an AMA. (1) Why was the welfcle frouted in an AMA (2) Why did amployee turned the vehicle too sharply write meking a right hend turn and hit a concrete wall. 2) Why did amployee turned the vehicle too sharply will be too sharply and the sound of the vehicle on a sharply and the vehicle too sharply and the sound of the vehicle of the turn. 3) Why did amployee allowed his mind to wonder and this coursed his locus while driving? While waiting at the sup sign amployee allowed his mind to wonder and this coursed his locus of focus.	(1) Why? Unable to get the backup from the SATABEAST? to restore APProofs. Why? SATABEAST2 was being moved or and was unavailable. Why? Notification to ECN team was not communicated. Why? SATABEAST Administrator used old group notification list instead of current one.

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	35446	35445	35403	35403	35399	35374	35374
	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond CA - Refinery	Richmond, CA Refinery	Richmond, CA. 35374 Refinery	Rehmond, CA 35374 Refinery
	4/10/2012 10:00:00 AM	2:40:00 PM		2:10:00 PM	3/28/2012 1:20:00 PM	4/1/2012 12:00:00 AM	4/1/2012 12:00:00
	Ciased	Closed	Closed	Clased	Closed	Closed	Closed
	Near Loss	Cost Negr	Loss	Loss	Near	5	S S S S S S S S S S S S S S S S S S S
<u>.</u>	Green Card Lack of deenliness and r maillenance. Losation:	Green Card, Old walkways need repair, Localion; Tanks 921 thru 924		Quality Control Operator suffered cuts to hands and face.	on furnace deck, Lucation: D&R V-3595	SDA F-120 outsids NO: polygon during shudow to change PSV	SDA F-120 outside NOx polygon during shuldown to change PSV
Operations is required to adjust flow from the #950 steam header to the #150 steam header located in this pipe way at the north boundary of the plant. This 8" velve is operated marual by an operation and is accessed by a pideform. The operator performed an LPSA prior to the task and feit the platform was too small given the resistance provided by the valve. To mitigate the risk and gain	Green Card. Lack of clearliness and mishlenance of men's shower room at Health Quest. When things are broken, they are broken for weeks, Right now the shownthead in large shower is broken and has been for a week now. Told is out of order, Culter showerheads and carlish nods wene broken and changed out by ampolyses at their own expense. Light builts were out for weeks and were written up to order a simple light built, which is a safely issue, and employee brought one from home again. Clearliness of the stowers is also an insue, we say for this facility and I use it everyday from hore and would like a good, dean and maintained feelity. Employees knould be reimbureed for money spent as well. Location: Health Quest			Quality Control Operator was about to clean a 250 mL beaker after using the beaker in a straight, He tracker in beaker and began to move the beaker to the dishwesther site. As he lifted the beaker and began to move he struck the edge of the stato of the stato of the stato of the furne Hood Stath with the beaker. He suffered minor cuts to his hand and face After dinsing the cuts with water, the OCO walked to the RIC danc for first aid.	Green Coard Smelled propains on furnace dock (strong odor), Followed smell back to open propains both into n deck. Location: D&R, V-3955 4 Rheniformer Furnace 1st Deck.	Wherenoved feed from the SDA modules but kept chargo oil feeted up through F-120 and some of the circulation bogs to eliminate the need to build on the circulation bogs to eliminate the need to build on the circulation bogs to eliminate the need to build on Friddy that we were outside the F-120 NoX polygon box once we moved to his mode because there sharply weark enough duly load on the turneon to his mode because there sharply weark enough duly load on the turneon to his mode because there sharply weark enough duly load on the turneon to his mode because the new could be delayed after we over-pressured and tilled the pay C-140 PSV, on ection tion was given to the RSL to consult with anxionmental-on-call about the NOX situation. Fer the RSL, polydence was given from the on-call that we would be obey with no Isausa. Upon reviewing the weekend's activity in the refinerry on knoday, the environmental group totentined an Issue with the entirery on knoday, the environmental group totentined an Issue with the repair of the weekend that we did not qualify for a curatiment exemption in the regs because, almough the production was curatified to basefully did normal. The studiesm exemption is based on furneos operation, not if see it is renoved from the plant, Gwen that we were out of the NOX polygon, we are now required to no do a source test in the out of box conditions prior to the next scheduled En	
	NL-Lossons Learned	NL-injury/linose · Employee injury	โญ้มรู/ก็โกลสซ	NC-injuryillness - Employee injury	NL-Lessons Learned	Environmental	Operational Process/Procedures
			(1) QCO did not perform LPSA and was rushing through the work to complote work by quitting time.	(1) QCO dd not perform LPSA and was rushing through the work to complete work by quiting time.		(1) The environmental on-call porson was trained in the NOx rule but was not stilled enough in asking the right questions to Operations in order to make an accurate equilation determination, (2) Operations will typically work with their EFC to understand environmental concerns with unplanned work. When the EFCs are unavailable, there is not a focumented expenses with unplanned documented process or others in HES to follow to help provide support.	(1) The environmental on-call person was trained in the NOx rule but was not skilled enough in asking the right questions to Opprations in order to make an accurate regulation determination. (2) Operations will typically work with their EFC to understand environmental concerns with updamed work. When the EFCs are unavailable, there is not a cocumented process for others in HES to follow to help provide support

<del></del>	<u></u>		
	35484	35485	35447
	Richmond, CA.	Richmond, CA.	Richmond, CA -
	1. 4 8:30:2012 PM	. 4/9/2012 2:38:00 PM	1, 4/9/2012 2:00:00 PM
	Closed	Cosed	Closed
	0 2	Lo sss	Near Near
	K-1171A 2nd stege head	While mechanics were replacing a relay to 86HY-809r in K-1600 RLDP-The compressor unloaded due to a blown fuse	Operator at risk for a fall injury in pipeway.
K-4171A was being put service to ensure Ops had a reliable back up for K- 1171. K-3950 relief compressor was being laten down for maintenance and K- 1171 was now in this service, Belore Ops stanted the compressor area	K-1171A was being put service to ensure Ope had a reliable back up for K-1171, K-3950 relief compressor was being liken down for maintenance and K-1171 was now in this service. Selvice Ope settred the compressor can operation and Hollested selline alianness associated with K-1171 A and used Job aid 4CUpC13]. The operation intiliably alterapted to start it! A would not start. Operation a decided the compressor with the suction before it in the MCC. The Operation stated the compressor with the suction before an electrican sociated with a rise of the selectrican sociated the compressor with the suction before with research of the MCC again. The few were no almost to indicate why it should some him to indicate with a rese operation, and the selectrican sociative suction when the compressor in the MCC again. The few of the selectrican sociative suction with the compressor in the MCC again. The few of the selectrican soult why it is stage peak to select the suction of the	On Monday Apr. 9 2012, I&E ware in the process of troubleshooting and repair toader relay 851y1805, At 14,35 OyNS 6 called to AO3 operator to verify K-1600 was running without issues. OWS6 that less all a flow Michael (4,600, AO3 reponded to OWS6 that the compressor was wrining and sounded normal. OMC responded to OWS6 that the compressor was wrining and sounded normal. OMC responded to K-1500 to verify instrument air supply had not been interrupted, Compressor unleaded due to loss of power to the loader relays.	mechanical edvantage on the valve. They were unable to loade the nisk neethy pipos and operate the valve. They were unable to loade the nisks associated with working in a pipe way due to the fact it is a common practice for operations. This task does present a significant tisk due the instability of the pipes as a working surface. Slop work authority was used and the task was completed with two operations using two pressuaders in order to miligate the risk of the valve working free resulting in a fail injury.
	Loss of Containment	Business Process	NL-injury/ilness - Employee Injury
(1) Operators observed liquid in the 1st stage bottle sight glass and deshoed it prior to startup. Although liquid was likely present in the second stage campener bottles, operators add not datan it as there are no sight glasses or atam instruments to indicate or taken operations, the operation of the potential liquids. Campressor operation, (2) Operators followed the odshing Job Ald to prepare K-1171A for startup and to put linking Job Ald to prepare K-1171A for startup and to put linking Job Ald to prepare K-1171A for startup and to put linking Job Ald to prepare K-1171A for startup and to put linking Job Ald to prepare K-1171A for startup and to put linking Job Ald to prepare K-1171A for startup and to put linking the prepared to the pre	(1) Operators observed fiqued in the 1st stage hotile sightights and deliered it yiru to startup, Althrogil fliquid was likely present in the second stage dampener bottles, operators did not drain it as there are no sight glasses or startin intrumente to indicate or sist operations personnel to petertal fliquids. Removing ell fliquid from K-1171A is critical for sist occupants, (2) Operators ollowed the existing both Ald to prepare K-1171A for startup and to put it into service; however, it does not lessant siep and provide the operating critical. Contacting the RER or Machinist supervisor would have been an additional way to address the athermant condition. (3) Compressor K-1171A does not have a har-over of jeck-over device to welf) liquid frae opiniders. A bar-over device oculd be retrofitated to the compressor frame at the could have been and discharge bottles of this age have an infernat weir to limit the amount of Equid that could onter the opinizer during normal operation. Unfortained fiquid could have being oxinder. (5) Beackflow of iquids at the first and second stage suicion and discharge bottles of this age have an infernative oxinder and subsequently washed into the k-1171A and stage oxinder. (5) Beackflow of iquids at the first and second stage suicion and discharge bottles of the first and second stage suicion and discharge bottles of the first and second stage suicion and discharge bottle drain connections is plausible since flee er on or check varies in the officin piping configuration that would prevent varies to the full-trait attempt at 10.05pm, in newsyr, there is no means to incord the more more compressor varies are gone to multiple is start altempt at the original overfload the second start without reaching an overfload condition. (7) The prior design of the K-1171A compressor valves were proins to multiple is suos that resulted in valve pleaces damaging the compressor of internative to the first start is a subsequently were recently upgraded to the more of internative to the more of inter	(1) K-1900 unbaded when the 24 volt DC main fuse blaw that powered all three hader solenoids. WHY-After a new 100% locars solenoid was installed it did not activate so fre Mechanics began trouble shooting with the 24 volt DC circuit energized and shorted out the circuit blowing the main fuse to all three of loader sciencids. WHY-5 year Mechanics did not have a clear understanding of the circuit, a copy of ten elementary drawing showing the main fuse nor know its physical location. WHY-1), Original project or modifications were not documented. Red lined updates were not recovered into the electronic direvings on Web and not not provided into the electronic direvings on Web and not avaisable to mechanics. (2) K-3600 unloaded when the 24 volt DC cricuit energized and enforted out of the control of the contro	

(1) We had a opacity violation at the FCC F-300 stack. Title V was entered. The operator was setting up to dump V-13 fines vessel to a vac. Truck. When the vecuum block valve was								
	NL-injury/ilinass - Employee injury	Green Card, When doing work by the exchanger, I noticed there is a tripping and fell hazard - a hole in the ground, Location: 888, by E-44.		Near	Closed	3/26/2012 8:00:00 AM	Richmond, CA - Refinery	35512
	NL-Lessons Leamed	Green Card, When working at FCC Cat, I noticed oil on the ground by E-741.	Green Card, Ollon ground by E-741, Location: FCC	Near	Closed	3/25/2012 1:00:00 PM	Richmond, CA - Refinery	35511
	NL-Lessons Leamed	Green Card: When I was walking out to E-930B, I saw D-902A was overflowing and leaking out oil and it is in the walkney, Location: S. tecmax	Green Card, D-902A is overflowing and leaking cut oil, Location: S.Isomax	L Near	Closed	3/20/2012 10:00:00 AM	Richmond, CA - Refinery	Richmon CA - 35510 Refinery
	NL-Lessons Leamed	Green Card. Overhead steam loak and lots of condensate in walkway. The leak needs scattoid and insulation removed, Localion: S. Isomaz K-1050	Green Card. Overhead steam leak. Location: S. Isomax K-1060	Near Loss	Closed	3/20/2012 9:00:00 AM	۵	Richmon CA - 35509 Refinery
(19) Cyneriors observed liquid in the 1st stage battle slight glass and drained it prior to startup. Although liquid was likely pitesent in the second stage dampener boilles, operators of on ordinal in the second stage dampener boilles, operators of on ordinal it as there are no signit glasses or alarm instruments to indicate or alert operations, personal to potential fliquids. Removing all kquid from K-1171A for startup and to put it into service. However, it does not describe neads trap and powid the operating criteria. Contacting the RER or Machinist supervice would be redicated as and dischard way to address the barrower of picchewise reducing the RER or Machinist supervice would be reducited to the compressor flavour however of picchewise reducing to verify inquid-free cylinders. A bar-over device cought for endirided is the compressor of this age have an infernal welf to link the amount of fiquid that local onlet the cylinders during more they would be reducing to the key think of the properties of the season stage studion and discharge bottles of this age have an infernal welf to link the amount of fiquid that local onlet the cylinders during him of which would prevent valve seast in the dain pibring comfiguration that would prevent valve seast intential that care the pibring comfiguration that would prevent valve seast steaking by. (6) The K-1717A breaker tripped during the first land second stage studion and discharge bottle of this first latent at 1005gm; however, the ris no means to record the motor current at each machine reliative to their full-load ampressor; The compressor could have efforded been internally weekened at the initial overload tips it 0.000m; and subsequently affect (10.200m) that the second start, without reaching an overload condition. (7) The prior design of the K-1717A compressor could have efforded to first the second start of the K-1717A compressor could have efforded to first the second start of the K-1717A breaker by seen internally weekened at the initial overload tips it 0	EquipmenVProperty Damage	K-171 A was being put service to ensure Ops had a reliable back up for K. 1171. K-95C mělaí compressor was being laken down for maintenance and K- operator and HO lestied all the attems associated with K-1171A, and used Job ald JCUp013. The operator inklielly etilemphad to start it, il would not start. Ops called for an elictification, livey responded and result the compressor area and HO lestied all the attems associated with K-1171A, and used Job ald JCUp013. The operator inklielly etilemphad to start it, il would not start. Ops called for an elictification, livey responded and result the compressor in the MICC. The Operator started the compressor stud down. There were no alarms to inklicate why it is thut down. The HO went out and taked with area operator, and the electifician about why it shutdown. There were no elemps as the started of the suicition result in a compressor in the MICC again. The HO checked the is it sigue skiply lights, il was spon to relief. The audition expectator for the suction to the House some of liquid accommission. The HO pressed line start button. Tho compressor ratio on line, the HO had the suce appeared reached the suction to the House was position crack the suction of its seet. The HO was watching the Tist stage bottle engle of the enrolled on the sit stage bottle enrolled to make the suction buille. The suction buille sight jeass had maybe at inches of fiquid in land holding steely. The HO had be suction to the suction to the first suction of the first suction to the first suction to the first suction of the first suction to the first suction to the first suction of the first suction to the first suction to the first suction to	K-1171A 2nd stage head	Loss	Cipsed	410/2012 8:30:00	<u> </u>	Richmon CA.
a bar-over or jack-over of alked to verify liquid-free cyclinders. A bar-over device could be retroited to the compressor flywhele and included in obsided starby procedures. (4) wheel and included in obsided starby procedures, (4) Typical compressor suction and discribing builties of the cylinder during normal operation. Undrained kiquid dealers the cylinder during normal operation. Undrained kiquid enter the cylinder during normal operation. Undrained kiquid enter the cylinder during normal operation. Undrained kiquid enter the cylinder during normal operation of the kiquid set the first and second stage suction and discharge bottle drain connections is plausable since there are no check valves in the drain piping configuration there are no check valves in the drain piping configuration there are no check valves in the drain piping configuration there are no check valves in the drain piping configuration there are no check valves in the drain piping configuration that would provout valve saids seathly by. (6) The K-1171A brasker tipped during the first seath attempt at 10.05pm, however, there is no means to record the motor control was the configuration of the k-171A compressor could have already been internally weakering an overload condition. (7) The prior design of the k-171A compressor could have already been of the k-171A compressor could have already to the k-171A compressor could have already to the k-171A compressor could hav	. ยางางการภาย	precine and not reside at the admine associated with Fr. 17 Ar. and deed use and could for an effectivities, they responded and reset the compressor in the MCC. The Operator stated the compressor with the suction booked in. As he caracted open the succion where the suction of the suction where the suction of the succion booked in. As he part and the electrician about with it examples are the first were no alarms so perator, and the electrician about with It shuddown. There were no alarms so perator, and the electrician about with It shuddown. There were no alarms so perator, and the electrician about with It shuddown. There were no alarms so perator, and the electrician about with It shuddown. There were no alarms so the alarms to notice the suction of the succion valve blocked in and the HD pressed the stat butten. The HD was watching the 1st step bottle sight glass; It was showing some of liquid accumulation. The HO operate the block valve to rel of on the social valve as watching the suction bottle. The suction was going to self and had the compressor came and that on indication at any it issues. Operating at and had the indication of any itsues. Operator has have the compressor sunded hormal and that on indication of any itsues. Operator has have a sundiciation of the itsues. The HO was watching the and the declared hormal and that on indication of any itsues. Operator has had been compressor spill and one we plume of relief gas coming from the 2rd stage and calmptain processor is block in the edischarge valve as what the compressor was all naming. The HO had a sefe path to the off button shull it down and closed the discharge valve and put the compressor was all naming.	K-1171A 2nd stage head	Loss	Clased	4/10/2012 8:30:00	Richmond,	35494

	35530	35525	35524	35620	35516
	Richmond, CA - Refinery	Richmond CA - Refinery	Richmond, CA · Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery
	3/21/2012 4:30:00 PM	4/11/2012 12:00:00 AM	4/10/2012 7:30:00 AM	, 6/1/2011 10:00:00	4/11/2012 7:48:00 AM
	Closed	Closed	Closed	Closed	Clased
	Near	Coss	5	[	Loss
	Green Card. Employee vehicle was almost hit Location: Center St. Bridge	Abdomin discumfort	inventory adjustment made to drum additive tocation from cycle count	incorrect purchase of engineered materials	Stack Opacity Timer Exceedence
	Green Card. Employee was driving vehicle ever a narrow bridge. This bridge is only wide enough for one ear to pass at a time, flowever, an oncoming car did not wait their turn and almost edde swipsed the other persons car, Location: Center St. Bridge (South of 125 Center St)	Employee complaining of accominal discomfort.	April drum addilive cycle count was conducted on 48/12. The Infineum T4716, product code 286317985, had a bock to physical discrepancy of +187 og deprox 3.5 drums). After review of this addilive, it was noted that at the time of cycle count over the past 3 months, this product has that a consecutive gain into inventory (each monthly adjustment was noted than 16 drums).	A Chevron engineer ardrod a specialized analyzer for an AD project to optimize culter injection in the 10 tail line at SISO. The PO was released to the manufacturer and the equipment was designed and built over the next several months. The engineer of record who performed the initial design work elected to leave Chevron in tale 2011, in early 2012 a taw analyzer engineer was assigned to the project. While performing a design review of the provious engineers work, she noticed technical gaps in his work. The purchased analyzer would not meet the process requirements for a successful installation. The loss incurred is the money spent for the vendor engineering and manufacturing of an analyzer that we can't use.	opacily timer exceedencs occurred while selling up to empty V-13 Cat Fines vessel due to K-138 Precipitator hopper 5BW dump valve stuck in the open position.
	NL-injury/illnese - Employee trjury	NL-injury/iliness - Contractor injury	Business Process	Business Process	NL-Regidatory Compliance - Permit Exceedance
(1) Incident Number 35543 Business Unit Cracking Location Aliy Facility Name Richmond Incident date 41 1/2012 Type of Process (ic4 Type of Equipment: Priping Jeam Miernbers: Laura Leeds Boby-Gulfmiller Pransil Prasad Ron Moore Generic Ibert Incident Description: Plant operator noticed a LPG vapor Gould near Fy-171, P.1420 minimum flow controller. The section of piping was isolated to stop the leek. Liquid spray from pipe leak was a topped within 10 minutes. CFD was notified and responded as a prezardon. This impossing the second of the piping taked FVE VHYY 5.  Why did "bover "happen? The pinhols in the carbon steel piping was caused by erosion/cromosion in the pipe occurring at a weld. 3. Why did "2" happen? Tree brinds in the scaron steel piping was caused by erosion/cromosion. Tree carbon steel piping was caused by erosion/cromosion. Tree carbon steel piping was caused by erosion/cromosion. Tree arounds of the weld. 3. Why did "2" happen? Tree brinds in the carbon steel piping was caused by erosion from steel piping at the world of "3" happen? Tree errounts of sufficie acid is whigh velocity accurred due to trace amounts of sufficie acid is highly velocity accurred due to the charge in pipe diameter from 6" to 3" and the current flow rate in the piping			(1) Infraum T476 (Drummed Addilive) has been being received for an amount of 52 US Gallons and the actual amount in the other states of the control of the c	(1) LOSS; Engineering spent \$500M on the design and manufacturer of an analyzer that does not meet the technical requirements to make the project successfully. WHY? The engineer specified the wrong equipment for the project. WHY? The engineer didn't fully understand the technical requirements to make this project successful. WHY? The ongineer had never teckled a problem like this before, RCF engineer had never teckled a problem like this before, RCF angineer had never teckled a problem like this before, RCF that of skill or knowledge, Nule: The five-why analysis was performed by the investigation team. Since the engineer in question no longer works for Chevron, the RCF analysis is based on Investigation findings only and not on discussions with the engineer.	closed on the vessel. The vacuum from the precipitator dump intensfer line was slopped. Dump valve slaw of the automated hopper dump valve she did all of the pressure in the out of services line increased. The air in the pressure in the out of services line increased. The air in the dump line blew up through the falled open dump valve though the hopper for the stack. OBO noticed the epacity, CCB instructed the Custade operator want to the hopper deck, discovered the sited open dump valve, but not expected to the challed open dump valve, but the popularly had exceeded the 180 seconds by that time, but eight CCBO3J, instructs the operator to place K-13A/B dump cycle on sequence pause. But decent in sirved the operator to verify the hopper ball valves are obsert.

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	35589	35588	35585	35584	35583	35581	35580	36570	35543
	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Retinery	Richmond, CA Rafinary	Richmond, CA Refinery	Richmond, CA Refinary	Richmond, CA - Rafinary	Richmond, CA - Refinery
	4/12/2012 9:00:00 AM	4/10/2012 5:30:00 AM	4/3/2012 2:00:00 PM	4/2/2012 1:00:00 PM	4/2/2012 10:00:00 AM	4/1/2012 7:00:00 AM	4/1/2012 7:30:00 AM	4/12/2012 7:00:00 AM	4/51/2012 1:25:00 PM
	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
	Loss	Near Loss	Nex	Near	i oss	Near Loss	Near Loss	Loss Loss	Loss
	Two cases lipped over and got caught by the sweeper errn.	Green Card, Colling board Is hanging by the entry door, Location: D&R Conf Rm 214	Green Card. Section line is leaking. Location: B&S Ethyl Plant	Green Card, Replace bridge siding, Location: D&R Bridge #38, across from control m	Green Card, Open flange policy, Localion; S. Isomax V-1050	Green Card, Overhead steam leak needs to be fixed, Location: S. Isomax K-1060	Green Cerd, Overhead steam tracing leak, r Location: 6, Isomax V- t 1052	Lab samples are not being processed in a timely manner.	Pinhole tesk on P-1420 minimum flow line down steam of FV-7-11
Graham moved their facility from Richmond, CA to Modesto, CA, Graham is the regular supplier of gallon jug bottles to RLP athough during this transitional partod Plasti-Pa K. (PPK) was contracted to satisfy gallon jug bottle inventiolies to RLP. It was contracted to satisfy gallon jug bottle inventiolies to RLP. The Procurement Operations (PDPs) learn in Houston was heavily engaged in the occurrenced of the transition and working with the plant by engaged in the occurrenced of the transition and working with the plant work of my disruption to operations. The RLP POPs Buyer, responsible for purchasing empty bottles, pleces all purchase orders within SAP against and PPK, Itawa e vendor number assigned to them. The vendor number is perpopulated on the SAP purchases or bottles. A decision was made by the Procurement Operations for bottles. A decision was made by the Procurement Operations in the sector of the sendor numbers changed in SAP assisting in a manuals work acount of the RLP POPs Buyer to manually change the vendor number send time a purchase of the other was processed for bottles. An employed in SAP assisting in a purchase of the SAP POPS Buyer to proceed the RLP POPs Buyer relaced an order 31 Dela 10x40 gallon jugs (component oute 980A6995) to economicate the fill extraction of the SAP vendor number assigned to SAP assign and the order defaulted to the SAP vendor number to surge a source and in a purchase of the SAP vendor number assigned to SAP vendor number assigned to present and the order defaulted to the SAP vendor number to present the focusion Procurement Ope team, Crawine confirmed that they would be unable to produce this bottle for PKT. The COPs Buyer to start out process to the source of the school or the SAP vendor number assigned to PKT. The COPs store change the vendor number assigned to the SAP vendor number to PKT. The COPs store change to vendor change in SAPOZO So the vendor number assigned to PKT. The COPs SUCK change to vendor number is SAPOZO So the vendor number assigned to PKT.	While running the Jug palletizer, two cases flipped over and caught on the pusher ber causing a crash in the machine. WAIS opened case and found a lear on side of boille that allowed oil to leak inside of case which tipped over when the pusher ber pushed case when patietizing product.	Green Card. The ceiling board is hanging by the entry door, Location: D&R Conf Rm 2.14	Gren Card. Section line leaking on Standard Ave., lours Ethyl area and a good section slain on the ground Location; B&S Ethyl Plant	Green Card. The bridge's wooden sidings are rollen and need replacing. Location: D&R Bridge #38 Acress from Control Room	Green Card. My understanding is Chevron has a No Open Flenge solley. On V-1050 there's a 7in. open flenge on the vessel. Location: S. Isomax V-1050	Green Card. Overhead steam leak needs to be fixed because a lot of hot condensate failing right onto the walkway. The leak needs insulation removal and scarfold. Location: S. Isomax K-1060	Green Card. I/A" steam tracing leak overhead needs to be fixed, because het candensate teak down to wallway. Local on: S, Isomax V-1052	Potentiety Leb samples are not being processed in a linely manner causing delays in puting stock into localions. Warehouse HVV and Supenisor will meet with the Lab Supenisor to follow up to see if lest results are being faxed to Warehouse for put a ways.	Plant operator noticed a LPG vapor cloud near FV-711, P-1420 minimum flow controllor. The section of piping was lookeds to stop the leak Liquid spray from pipe leak was stopped within 10 minutes. CFD was notified and responded as a precaution.
	Business Process	NL-Lessons Learned	NL-Lessons Learned	Nt-injuy/ikness - Employee injury	NL-Lessons Learned	NL-injusylläness - Contractor injury	Nt-injury/linese - Employee injury	NL-Lessons Learned	Environmental
(1) A. What? Rt.P missed a production fit of Date 10W3D due to lack of botte availability at Why? Bolites by 31 pation Date 10w3D logs (86004595) war out of stock by Why? Appropriate vandor/supplier dat not inseate Purtarese Order for bottless, or Why? A part of the Why? A called a vandor numbers and purtarese orders are processed through SAP with offout vandor surplayed to which called twendorship with a made to not charge SAP vencor numbers by Procurement Operations	(1) What? Jug of Delo 400 LE 15440 leaked Inside of its box Why? Jug had a spiki when foeded into the box. When box lipped over, product leaked out Why? PPK jug s occasionally spiki due to filmay design companed to the Graham jug. When packed by the drop packet, the liquid prossure causes the bottle to spiki., (2) Duplicate investigation								due to operation of the unit. The lumbulence occurs doe to the control valve and the reduction/sepansion that occurs nearby the control valve and the reduction/sepansion that occurs nearby the control valve cettes tribution flow conditions. S. Why did "4" happen? The change in pipe size occurred to accommodate the staze of the control valve FV-71 in which is a 2" who that was sized for this application in 1985, initial installation critical and not deputify this area as potential for more necrosion due to high volocity hydrocentum with toos suffice acid an antiniment, ROOT CAUSE(S) what were the Root Causes of your incident? Add more as needed 1 high velocity and unclearly a this installation of while id not in the control of the second state of the second state is plant; (that equal to control part of the control of the second state) and id not

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	35753	35752	35734	35708	35647	36635	5636
Richmond, 4/12/2012	Richmond.	Richmend, CA - Refinery	Richmond, CA - Refinery	Richmend, CA - Refinery	Richmend, CA - Refinery	Richmand, CA - Refinery	Richmond, CA - 35636 Refinery
4/12/2012	4/16/2012 12:00:00	4/16/2012 12:30:00 PM	•	3/30/2012 12:00:00 AM	4/13/2012 9:00:00 AM	4/12/2012 12/200/20	4/12/2012 12:00,00 AM
	Stewardship Review	Closed	Closed	Closed	Clased	Closed	Closed
	Near	Near	Loss	Near	C S S S S S S S S S S S S S S S S S S S	COR	Near
Safety Bypass Form not	Operating Below NH4Cl Sublimetion Tomp on V- 710 Overnead Piping	EE feeling ILL and taken to clinic for evaluation.	impact to lower lip causing e cut to the inside of the month.	Started Filling T-1966 before the MOC 24530 Stage It was signed off	Drot boom struck overhead wooden structure	Jug Bottes ordered from	Jug Bolles ordered from wrong vender
IL-1656 the PRD on E-1601 splitback was lifting allowing waxy feed to leak by	The V-710 overhead temperature is operating close to and sometimes below the ammonium chloride sublimation temperature, which means saits could be subliming in the nun of pipe quastream of E-711. Raising the temperature at the proper phase until wash water is injected at E-711. While working with ETC to troubleshoot the cause of a previous faiture on E-711, it was teamed that the calculation method used to calculate the ammonium chloride sublimation temperature on the V-710 everhead piping was incorrect, it was previously thought that the V-710 overhead piping temperature (731741) was operating more than 15 deep above the ammonium chloride sublimation temperature. The corrected calculation shows that the V-710 overhead piping temperature is operating your dose to the emmonium chloride sublimation temperature. The corrected calculation shows that the V-710 overhead piping temperature is operating your dose to the emmonium chloride sublimation temperature, and sometimes below.	EE was feeling ILL and was taken to clinic	All approximately 09:15 am. on Monday, 04/18/12, a mechanic was replacing the PRD off of the elf optinder underneath the classel pump platform at #13 separator, and whitel lightening a 7/8" rul on the risk lange, the wrench slipped off the rul and struck the mechanic in the tower lip, resulting in a small cuit to the lower lip and slight swelling.	Slarted filing T-1986 prior to the MOC 24530 being signed off in Stage II	Removing Drott from weld bay mechanic did not relice boom was lifted when performed walk around. Vehicle had been previously parked with boom not completely stowed. When driving through gate boom caught wooden structure sbove. Wood broken no danaeys to drott.	Graham moved their facility from Richmond, CA to Modesto, CA. Graham is the regular supplier of gallon ly bothes for RLP arbonyth curing this transitional particle Plast Pak (PPK) was contracted to satisfy gallon lyg bothe inventories to RLP. Although curing this transitional particle Plast Pak (PPK) was contracted to satisfy gallon lyg bothe inventories to RLP. The Procurement Operations (PDCs) learn in Houstern was heavily engaged in the coordination of the transition and working within SAP plant to avoid any disruption to operations. The RLP POPs Buyer, responsible for purchasing emply bottles, places all jurchases orders within SAP gallonit responsible for purchasing emply bottles, places all jurchases orders within SAP gallonit responsible for process supplier for bothe inventor number is pre-populated in SAP on purchases of statement of them. The emplor number is pre-populated on the SAP purchase order, As RLP nemally receives bottles from process and the purchase of statement of the RLP POPs buyer to manually change the procure and the RLP POPs buyer to manually change the vendor number seath time a purchase order was processed for bothes. An email was received by the RLP POPs buyer to manually change the vendor number seath time a purchase order was processed for bothes. An email was received by the RLP POPs buyer to manually change the vendor number seath into a purchase order was processed for bothes. An email was received by the RLP POPs buyer to galloning an upcoming fill requesting a purchase of bettles. The RLP POPs buyer to manually change the vendor number assigned to the RLP pops buyer to galloning an upcoming fill requesting the process, the Buyer went into OCs to order the components and the crider dealeded to Buyer them the purchase of the RLP pops buyer to galloning an upcoming fill the order the process the buyer was process. The weakly angagement with Galloning would be unable to produce this topic valid for RLP requesting that the order by well dealed to galloning and produce this topic	rigination son 417 for pean receipt on 4/25 to accommodate beenbaulas at in 4/27. This neaf loss resulted in zero deven fine on the high fine and no customer cute, it has been confirmed that Grahem Modesto is now fully serviding RLP with gallon lye brittes and PPX Highlands is no tonger required to provide couline bottle supply to RLP.
NL-Operational	N Equipment/Property Damage - Equipment Damage -	NL-injurylilness - Employee injury	Injury#liness	NL-Business Process - Business Process	NL- EquipmentProperty Damage - General Lability	NI_Gustiy - Product	NL-Business Process - Business Process
	(1) The ammonium chloride sublimation was not calculated correctly. 5 Why: 1. Why was the operating temporature close to and sometimate below the ammonium childred sublimation temporature? The ammonium childred sublimation temporature? The ammonium childred sublimation temporature? The ammonium childred sublimation is ammonium childred sublimation temporature as the ammonium childred sublimation temporature and calculated ammonium childred incorrectly as the nation correct penaltic and design phase used a lower ammonia concentration and higher steam rate than correct ammonium childred in the calculation of the ammonium childred part of the sublimation than content and the calculation of the ammonium childred part of the sublimation temporature. A Why 2x? Sufficient part of the was not available to determine the actual ammonium childred sublimation temporature. 4. Why 2x and 30? Lack of knowledge.		(1) The mechenic was in the line of fire by pulling the wrench at himself. Mechanic agrees that he should push the wrench away from himself whenever possible.	(1) Communication to the on shift personnel was less than adequate, (2) Communication to the on shift personnel was less than adequate., (3) Compliance with the MOC/PSSR process was less than adequate.	(1) Why 1 - Orove boom into overhead structure, Why 2 - Did not lower boom before moving, Why 3 - Did not notice it was parked with boom seveled, Why 4 - Did not use pre tip inspection form. Why 5 - Did not use in the pest and had no problems.	(1) A. What? RLP missed a production fill of Dato 10W30 due to lack of bottle availability a. Why? Bottless for 3/1 gaton Dato 10x00 lyas (Bg0005993) were out of stock b. Why? Appropriate vendor/supplier did not receive Purchase Order for bottless. c. Why? Vendors have assigned vonder numbers and purchase orders are processed through SAP with default vendor/supplier des gnation d. Why? A decision was made to not change SAP vendor numbers by Procurement Operations Houston requiring manual work processes by RLP POPs Buyer for drayle vendor number manually in SAP. e. Why? POPs Buyer did not make the manual change to the SAP vendor further prosulting in purchase order misdifficulton to the wrong supplier.	Rousion requiring manual work processes by RLP POPE Buyer to change vandor rumber manually in SAP, e. Why? POPe Buyer did not make the manual change to the SAP s vendor number resulting in purchase order misdirection to the wrong supplier.

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	35951	35 e g 5	35059	35853	35811
	Ricamond, CA - Refinery	Richmond,	Richmond, CA - 35059 Refinery	Richmond, GA - Refinery	CA - Refinery
	3/6/2012 12:00:00 AM	417/2012 11:35:00 PM	4/17/2012 12:30:00 PM	3/24/2012 12:00:00 AM	1:00:00 AM
	Citosed	Classed	Closed	Closed	Closed
	L05\$	Coss	Near	Loss	Near Loss
	T-1492/1493 & T-1634 out of compilance on flash point, T-3194 ext of compilance for API	LNG wash water flow pontroll chooped while testing the HNC tow flow chop, Cawring the PRD to lift on P-1453A.	24 station sump over filed into containment basin	High H2O by dist lavel in T-1899 could not be feet unit water was dropped out to water trapped between foam dam and lank roof see!	was isolated.
While scoping a home for light dissel for an Isomax test run, it was suggested that this meterial go to 1-1492/1433 DHT Feed tlanks, IHES and PED were consulted and determined that these lanks would not be suitable since they are not permitted to store material at or below a flash point of 100 F. PED raticed a concern that we currently any not be above 130F. PED on 3 HES reviewed data going back to April 2007 and found that both tanks have stored material.	While scoping a home for light dissel for an Isomax lest dun, it was suggested that this material go to 1-1492/1493 DHT Fead teach a IRS and PED water consulted and determined that these tanks would not be suitable since they are not permitted to store material at or below a flash point of 130 F PED raised a concern that we currently may not be above 130F. PED and HES reviewed data gring heat to April 2007 and found that both hanks have stored mistinal below 130 kegroso F around 69% of the time Alter Heathlisting 1-14223 as out of compliance, HES & PED did a review of all tanks that were classified as exempt tants to find any other issues. 1-1624 (Jet) was found out of compliance on flash point, and 1-1394 (FCC Feed) was out of compliance on flash point, and 1-1394 (FCC Feed) was out of compliance on flash point, and 1-1394 (FCC Feed) was out of compliance on flash point.	While lesting HNC wash water low flow chop, wash water dipped in the LNC. This caused the LNC wash water flow controller to chop. This caused the PRD to fin on P-1453A.	21 std. sump which pump into the 10 drop line was blocked in because of the scheduled work on the relief header in 17 station. A reaumn truck was on site to pump out the sump writenever the sump reached high level. During that if we hapfe was a sample property of the sump writeners and the vacuum intock was called to cover the job at 21 pump stellon sump. When the Head operator arrived at 21 std. to show the driver where to tend the head operator darked at 21 std. to show the driver where to the high the hose, he saw the sump was stelling to over frow. The Refire Board operator dariot receive a high fevel alarm. The 17 P. S. surap is a sealed bystem anothere is no existing PM program. There is no robline duty to test the High fevel alarm.	On March 24th water frapped between the foam dern and T-1899's root. Further inspection showed that the foam dam had become plugged with debris from nearby pine needlas located on the hillside. The water buildup at the foam dam ceused water to migrate into the product frough the gauge well gap within the root deck. The water migrating to the product resulted in a high 5 & V. It was determined by oils planning and put in the orders that locating the bottom stops (not-long the water) onto a 1857O barge was a spoot way to remove the water. The barge was located off the VERY bottom of the tink. A significantly higher volume of water was located onto the barge than was expected.	to relief. The PRD was blocked in, but this was not clearly communicated to the Process/Procedures - HO, A Safety Bypass Form was not completed at this time.
	NL-Regulatory Compilance - Non Compilance - Air	Operational ProcessFProcedures	NL-Environmenta) - Spili	Queity	Process/Procedures - Safety Systems
	(1) When the Title V permit was adopted, HES did not communicate the designated limit for the exempt tanks (2) Develop CEVs for all regulated and exempt tanks.	(I) *FIVE WAY? One Page Report Incident Number 25885 Business Unit Pyron Location RLOP Facility Name HICL modent date 4/17/2012 Type of Pocess: Wash Water Type of Euglymant Pump P-1453A fram Members: Incident Describion: What Operator testing WW fow few shuldown on HIC, Standard guidelines have the operator handjack open control valve slightly, then zero the male: While slightly control valve slightly, then zero the male: While slightly control valve slightly, then zero the male: While slightly control valve slightly, then zero the male: While slightly descharge pressure to rise, results in the MY pump descharge pressure to rise, results of the the AMT 23:30 descharge pressure to rise processes) HIC When; 23:30 descharge pressure to the processes; HIC When; 23:30 descharge pressure to rise processes to be addressed?; 1, imped LINC ww white testing HIC 2. PRD lifted and did not proberly reset FIVE wHYS 1, why did above happen? Vortication Tripped LINC ww. causing P- 145AA discharge pressure to rism 2. Why did "* happen? While handjacking open the HIC ww flow dipped to INC causing bw how chop; 3. Why did "The processive in Insistrat cuidated. 3. Why did "A happen? Processive in Insistrat cuidated. 3. Why did "A happen? Processive in Insistrat cuidated. 3. Why did "A happen? Processive in Insistrat cuidated. 3. Why did "A guidiness the operators use to test these sligs 4. Why did "A happen? Processive fundem in Miniber 36:505 Sustiness Unit Hydro Location RLOP Facilly Name HIC incident date 4/17/2012 Type of Processive Wash Waster Type of Equipment. What Operator Incident in Miniber 36:505 Sustiness Unit Hydro Location RLOP Facilly Name HIC incident date 4/17/2012 Type of Processive Wash Waster Type of Equipment. What Operator Incident in Miniber 36:505 Sustiness Unit Hydro Location RLOP Facilly Name HIC incident date 4/17/2012 Type of Processive Wash Waster Type of Equipment. What Operator Incident in Miniber 36:505 Sustiness Unit Hydro Location RLOP Facilly Name HIC incident date 4/17/2012 Type of Processive Was	(1) No routine monthly check done on the high level elern.	(1) There was no procedure/ Job ald to define the required checks that required operators to conduct during heavy rein event of 1-2 inch per hour.	(1) Operator was not fully aware of Bypass Safety Form usage / had not been involved in the process before.

(1) Ymy did SISO operator injured right shoulder attempting		A SISO operator was performing a LOTO on MP-332(A-train MEA pump). White Isolating the suction valve which has a chain operator, He noticed the valve was not moving and the chain was stipping indicating the valve was					
(1) Tefron disphrægm cracked, (2) Meisi check valve on exhaust line too heavy for ptastic bhreaded pump connection	AL∹injuy/iliness - Contractor injury	INITIAL DESCRIPTION: BEE LINK ATTACHED IN INVESTIGATION FOR COMPILETE TOP REPORT. A 14:20 was Contractor EEE; an process to access week area one Poysonal H2S monition alarmed and closined (once cut of the area) Both was within 2: of each. Contractor EE perconal H2S morthly alarmed and closined – EE immediately stopped and backed out of the area. Reported the incident to HO (Operations founded pump with plastic case leading sour wealth; (Pump was isolated and area dearned). EEE forgennal and Chevron Rep were notified. EE was with a partner (-two feet part) and both were wearing personal H2S monitors and respirators with vapor cartridge. (High heat paint vapor prevention) EE's did not small H2S at anytime CFD was objectived and context partners and captions of the context partners. EE was instituted to git now mortior or bump the used one. EE redates was closely one was instituted to git now mortior or bump the used one.	P-3301 sour water teak	Closed Year	473372012 2:28:00	Richmond, CA - Refinery	36224
(1) • There is no existing inspection program in place to agularly check correston on the Vinchas at the Long What/	RL- RE- Equipment/Property Equipment - Demege - Equipment	Mk-403 (Caplsar winch) at Berth 1 has a failed motor mount which will require extensive repair. RLLV craws are using MK-102 to pull in the reassenger fine attached to the vessel spring lines tooping around a mmaining section of the corroded metal at MK-103 in order to place the spring lines onlo MK-103 hooks. This crastles tramendous staffin on the measurager lines which could snap possibly resulting in parsonnel injury. Additionally, by having to loop the measurager lines around the somoded metal the strain while pulling tension could cause the already corroded metal to be made and similarly poses a risk to personnel. Berth 1 is also undergoing fender repairs and some of the steping attached to the face of the dock was snagged by the spring lines and had to be disloged by Operators using poles.	Had to use NK-102 to pull in messenger line for spring lines to MK-103 during blenhing of CSK Shelich. The placed a fremendous strain on the messenger line as well placing personnel and equipment at risk.	Closed Less	4/22/2012 1:10:00	Richmond, CA - Rothnery	36130
(1) FUE WAY'S 1. Why did *above *nappen? Verification C-180 over pressured and vented to relief. 64PC 182.2. Why did 18 over pressured and vented to relief. 64PC 182.2. Why did 19 happen? Following procedure step to heat up when column pressure went high prior to the destined temperature 3. Why did 2" happen? The column and overhead accumulation was the wrent stanting the procedure with stock. Operation believed the level to be at it por glage glass and manageable. 54L1180.4. Why did 3" happen? Did not realize it was fliquid practice of the set leves. Sinder prints and thyrigh to be at the port prints and thyrigh to be at the port prints and thyrigh to be at the port prints and they be accommon when pressure increased. 5. Why did 4" happen? Leck of operating experiences and checklist whole for an embly column.	Environmental	While putting C-18D in service the column overpressured and lifted a safety.	C-180 overpressure	Closed Loss	4/Z9/Z01Z 12:00:00	Richmond, CA Refinery	36085
(1) FUE WAYYS 1. Why did *abows* happen? Varification C. 190 over pressured and vented to reties. 34FC 182 2. Why did 11 happen? Following procedure step to heat up when column pressure went high prior to the destred temperature. 3. Why did 2" happan? The column and overhead accumulation was hid when starting the procedure with stock. Operator befewed the level to be at the original place to the step or gap glass and manageable. 54L1180 J. Why did 3" happen? Did not reatze If was liquid packed as far as it was. Started refluxe or they place If was liquid packed as far as it was. Started refluxe to they did 4" happen? Lock of operating expenience and checklist while for an impty column.	Operational Process/Procedures	While putting C-180 in service the column overpressured and lated a safey.	C-180 overpressure	Closed Loss	4/20/2012 12:00:00	Richmond, CA - Refinery	36095
(1) Shulting down power to Breaker Panel for scheduled Panel work resulted in loss of power to both power supplies on the RICB41RFMESXZ Server. Though both power supplies wore plugged this different PDU's, both PDU's were connected to the same Breaker Panel.	NL-Business Process - Business Interruption	Electrical work had been planned to replace designated 20 amp breakers with 30 canp breakers within 3 Breaker Pandis focated at the Richmond Refinery Data Center, Price to his job tack, some gre-work was performed to ensure that all equipment in the datacenter had dual power supplies with each power supplies with each power supplies of firerant power distribution units (PDUs) connected to different Breaker pandis, a the first Benoker Pandis was de-energized, the RFMS VM Host Server RIC841RFMESXZ lost all power.	Loss of Power to RFMS	Fact Near Gathering Loss	4/17/2012 7:00:00 P	Richmond, CA - Refinary	36045
(1) Employee may have taken his welding food off improperly.	Injury/liheas	Welder grinding went to break and felt something in eye.	PARTICLE IN THE EYE	Closed Loss	4/19/2012 2:30:00 PM	Richmond, CA - Refinery	36035
	NL-injury/liness - Employee injury	Green Card. Several of us were packing vehicles in this area. There is a burn to park the vehicle over However, it is difficult to see when getting in and out of one's vehicle actor moving secund one's vehicle. Location: Parking lot near Fleshouse turnstile on Chem Lab side of fence	Green Card, Uneven surfaces, Location; Near Firehouse turnstile	Closed Loss	4/17/2012 10:00:00 AM	Richmond CA - Refinery	36005
(1) When the Title V permit was adopted, HES did not communicate the designated fault for the exempt tenks, (2) Develop CEVs for all regulated and exempt tenks.	Regulatory Compliance	below 130 degrees F around 50% of the time After identifying T-1492/53 as out of compliance, HES & PED clid a review of all lanks that were classified as exempt tanks to find any other issues. T-1534 (Jal) was found out of compliance on flash point, and T-1394 (FCC Feed) was out of compliance on flash point, and T-1394 (FCC Feed) was out of compliance on API.	T-1492/1483 & T-1634 out of compilence on flash point, T-3194 out of compilance for API	Closed Loss	3/8/2012 12:00:00 AM	Richmond, CA - Refinery	35961

CUSA-CSB-0000191 EPA

https://impacterm.chevron.com/IMPACT/ANYWHERE/Reports/exports/scenario_159134_f8a5390b-1e90-4874-b012-4d17412a3a40.htm 8/9/2012

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Coss of K-1400 / HHC	Gets Arm (owersd White Driving Through Gets 31	Contractor nearly this by truck in gate 91 perions los	RioS41ntSnetmen saryar stopped working	NACO Chemical Anine spiled to grade - Nity contained	Green Card, Hoed a KEEP CLEAR Sign near gate entrances, Location; Hein Care, Gate 14	Operator shoulder every
Kr. 100 threat hearing probes (C), the week to during the their and the stays probe (Conjunation specify types)	In chapting were in company and a long leading water adjusted it is extracted in 10 Gails, (the other hands and the 2 days) for bidges leading spicered) the authorized seat as puto like the location at the sent given location for the sent and the sent given location and the sent given location. For the sent given location is sent to consider the sent given location and the sent given location in the sent given location in the sent given location in the chapting location in the sent given location in the chapting sent location in the sent given given to be both the sent given location in the sent given given to be both the sent given given to be both the sent given given to be both the sent given given to be sent given location in the sent given given to be both the sent given given to the sent given given to be both the sent given given to the sent given given to the sent given gin	Gren Card - White eating the retinoon at the SI gain parking it, a pick, up not carns in twen the opposite tide of the lot and created my way (mashigme about 54 every).	Server integrel working without any notice and was not bead by reboosing the server. The conditions or otherwise mirrog on the server was not anymbia to morther over pysiens. This until is used vinorably cody as these was no which on the subtrainer beas, integrate intervinence your untwellable for copyiny (.4) hours of the topic was the Server I chan'd a first to trouble shoot and retican the until whoch was also (2.5) format (etc.).	Apprilationally 2 per 43/412, Copes operator Stand Anties behing form a chaincal data of more than 147 data or and, Copesch immediaty blooked at 1 per 43/412, Copesch immediaty blooked at 1 per 43/412, Dope field at 1 per 43/4	Gren Cert. When stopping at the gate entherces to arrive owings, the gate work open same reas, So we assisted up to cour the gas same for the the which obsticed as wis to copie we prout not least it. Lookers, hair gas a not provided in 10 for excell four fill of least 1, Lookers, hair gas a not provided in 10 for excell four fill and least 1, Lookers hair Gat. Exclusive from Sec. Each is served in the Company of the Four Four Four Exclusive from Sec. Each is served to the company of the Com	local manny. After accessing the spiciation of projects to the parties of seaso and a parties of the spicial of
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(i) Hazard Anayas sit. The concile maning lased for the mode) price addes had an excesse maning lased discussed and price addes had an excessed manifest pit Doses. The vast and discussed and immediate pit Doses. The vast and discussed and discussed and convents to be diseased with mediate pit Doses. The vast and excessed and convents to be diseased with mediate and set and an excessed discussed and analysis of the convents of the price and the price and the convents of the	(1) Security Officer did not reform driver to wait unit gale arm poted;			(1) Gago gası vahe isa com	(1) Referen Cale enters (excluse) instance; matantion and case has not been determined; (2) Vertices need to inverse learn from gains enter or exist and respons a which could cause contain with webtile walking in the 1, (3) (1) (1) out of Cale 212 (ferbours lett) could be appointed by a position of the 121 (ferbours lett) could be appointed by a position (Fertical Cale 212 (ferbours lett) could be appointed by a position of the country of the resemble of the country	to close a calent? Operator Materioly of to reverse the force on the control of t

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	Richmond. CA - Refinery	Richmond, CA - 36465 Refinery	Richmen CA - 36435 Refinery	Rich CA-	36434 Resnery
	mend. 4/7	mond, 48	Δ	Richmond. 4/	Y.A.
	4/26/2012 10:00:00 AM	4/24/2012 10:00:00 AM	4/25/2012 5:00:00 PM	42842012 1278-0012	S
	Closed	Closed	investigation in Progress	Ciosed	Closed
	Loss	Loca Loca	1033	5	1088
	T-3076 Mixer Leak	Green Card, Calwak on top of tank overloaded, Lecallon: HazWasta Annox	Fire on analyzer Al-993	Loss of K-1400 / HNC	Plant shut down
INITIAL DESCRIPTION: SEE LINKATTACHED IN INVESTIGATION FOR	INITIAL DESCRIPTION: SEE LINK ATTACHED IN INVESTIGATION FOR COMPLETE TOP REPORT While the operator was checking T-3076 for the 1st nil per fau tank checklist it was observed that oil was coming out of the mixer shall feeding. About 5 gals of TKN feed typs spilled into the concrete primary containment.	Grean Cart. Catwalk on top of tank ovarioaded with materials while not properly supported, bending catwalk down to tank under load and consequently bending up on the opposite and causing a inspiring hazard. Location: Haz/Yadio Annex	Operations responded to fire at Al-983, 3rd stage H2 puricy analyzer to RLOP	K-1400 thrust bearing probes (2), one went to danger state end the other probe	werk to stert stere.
	Cuality	Nt Equipment/Property Damage - Equipment Damage	Fire/Explosion	Operational Process of	Damage
(1) SOS: Maintenance & Inspections Mechanical Integrity: Valve was not islad in ICEM parts Illustration. Shop left went valve out., (2) SOS: Trienting & Procedures: OCI Intellige Checklist not used during installation orto tank. Checklist notes & Respensibilities not clearly defined. Mechanica overlocked the missing went valve during installation, (2) Silobert Issue. Maintenance & Inspections (Mechanical Integrity): A second sak was found the next day on a second miker for tank T-3076; it was reported that a part had been impropely aligned and also base foils contributed to this leak. This problem was not identified during the quality inspection and assurance process performed shortly effect and assurance process performed shortly effect.	(1) \$05: Maintenance & Inspections Mechanical Integrity. Valve was not istad in OEM parts illustration. Shop left vent valve out., (2) \$05: Training & Procedures: OCI Install checklist roles & Responsabilities not clearly celinact. Checklist roles & Responsabilities not clearly celinact. Mechanical checklist roles & Responsabilities not clearly celinact. Mechanical overlocked the missing work white during installation, (3) "Sidebart Issue. Maintenance & Inspections (Mechanical Integrity: - A second less was sound the next day on a second mixer for lank "1-2075. It was reported that a part had been impropely aligned and also loss boils contributed to this lask. This problem was not identified during the quality inspection and assurance process performed shartly after assembly of mixer. * Tank mixer assembly is not pressure tested prior to Installation and commissioning into service. Sometimes boils, screwa and other parts can be jostled during the tempsycotation process. These parts need to be verified in the field before installation.	7. T.	(1) Why was there a fire in the analyzer cabinel? Because the root valve was absed but leaked by and the second black valve was still in the open position without a bleeder open. Analyzer has been out of service since 2003 and was stated for replacement, but was not isolated properly. Unable to determine the cause due to the original solation was done 9 years ago.	(1) hezard Analysis III. The conduit routing used for the eddy probe cables that dan excassive number of elbows without intermedule pull boxes. This was not discovered and consisted. The conduit routing caused the cables and consisted. The conduit routing caused when they were pulsed into the conduit during installation. Damaged insulation, water and convectors to be damaged when they were pulsed into the conduit during installation. Damaged this usual on, water and convectors there was no ices of voltage but with time degradation occured. There was in this unreflected damage not affecting voltage and then progressive degradation began -not a sudden loss of signals which eventually maulted in voltage leakage, diffling of reported axial position from the totage leakage, diffling of reported axial position from the totage leakage, diffling of reported axial position from the totage sudden rost and turbine via Francisco in the seconduit. Removal of position is imprecible, and counterproductive strict it would only add to insustation demage, (2) Enforcement NII - Corrective Abilinenance on the 84VI5 IAZ Inhust channels was not inferience. The thrust channel expair was understanding the first channel outgot was not monitored long enough to identify variance and take corrective action and perform rework repetits before the firp occurred. Akthough the first channel outgot was not monitored long enough to identify variance and take corrective action and perform rework repetits before the firp occurred. Akthough the first channel outgot was not inferience on the second of the restriction of these probas which indicated TK-1400 was not inferience and gene condition in these provided considering information to the thrust eddy probas which indicated TK-1400 was not inferience and dis not require a shutdown, consideration of these condition and did not require a shutdown, consideration of the second by the timus design of the second by the strict of the struction of the should be corrected and verified.	could be corrected and yenifed.

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4/27/2012 10:00:00	5:00:00 AM		4/26/2012 1:30:00 PM	4/26/2012 1:30:00 PM	4/24/2012 12:00:00 AM	4262012 1230:00 PM	4/26/2012 12:00:00 AM	4/26/2012 10:00:00 AM
	Closed	Closed	Closed	Closed	Closed	Slawardship Rowew	Closed	Closed
	Loss	Near	Loss	Loss	Near	LOSS.	Loss	Loss
K-1400 seal trap stuck open iripping FCC/RLOP	Misinterpretation of Managers E-Mail	T-3193 Suct and Fil lines incorrectly fled into the tank.	E-1411 band losk	E-1411 head took	Communications Board failure affects dispatch control	Electrical contact with PGE	Oil Spiil to Ground at T-	T-3076 Mixer Leak
		80						
While satting up the HNC for tong loop circulation in an effort to heet up E-1411 worshy and mitigate the chance of a lick. Flare Gas Recovery began to see a significant increase a riber. The Pressure control Valve was single blocked again and flow to flare gas did not decrease. Thirtimg it was the low pressure separation system delayed insubschooling other systems. Once operations vanified it wasn't the Low pressure separation system they continued froubleshooling other areas and found the Seel oil controller on K-1400 stuck.	Misinterprelation of Managers e-meil causing the wrong supporting documents to be delivered to him for stewardship activities out in the field. This caused loss of time for him and re-work for me.	During the studdown of 7-3193 inspection celled about the suction and fill shest configuration. After futher inspection with operation it was determined that the suction and fit lepellines had begin incorrectly ted in to the tank (fill line->Swing Line & Suction Line-> Fill line defuser)	When K-1460 was started, liquid and vapor began to flow through HNC high pressure system. The temperature difference between products caused to Channel Head to Shell Head joint to teak hydrocarbon onto the asphalt below. (Bubs adde aftend Fr. 1410 to R-1411) (Shell side cracked stock Fr.V-142DE-1504 BaA to F-1500).	When K-1400 was started, liquid and vepor began to flow through HNC high pressure system. The temperature difference between products caused Channel Head to Shell Haad joint to leak hydrocarbon onto the asphalt below (tube side effect fre.1410 to R-1411) (Shell side cracked stock Fr V-1420Æ-1504 B&A to F-1508).	Communications Board failure affects dispatch control. No failure occured but a break was registered 7 times and restored.	The task involved the pole topping of the existing pole line for TL/14812 at Pele 4038. While leading pole pieces, crains aparatic becomes the craine upon up class enough to the existing POSE energized eventheed lines to energize the crains. The craine shocked the gravidinant when he touched the crains.	While sitting the Heater Crestation pump out or service at 17-3194 tenk the pump was noted and electricity isolated. After deanurgization the pump had to be drained, it appeared to the operator to have no pressure on the pump case and the pump was not equiped with a drain valve on the pump case. The built pump was not equiped with a drain valve on the pump case. The built plug on the pump case was marked at a the only other way to drain the system at which time the pump burped gas oil under pressure to containment.	COMPLETE TOP REPORT. While the operator was checking T-3976 for the 1st fill per the tank checkles it was observed that oil was coming out of the mixer shalf location. About 5 gais of TKN feed type spilled into the concrete primary containment.
Operational	Business Process	NL-Business Process - Business Process	NL-Operational Process/Procedures - Safe Operating Limit (SDL) Excanded	Operational Process/Procedures	NL-Business Process - Business Process	injury/ilinass	Environmental	Environmentel
(1) Why did RLOP and FCC flare totalizers trip? Totalizers tripped due to high flow from K-1400 scal oil trops. Why was there high flow from K-1400 scal oil tripp? Seal oil level concider stuck open. Why did the seal oil twel controller sick open? The seal oil tayel controller failer open due to a	(1) upon re-reading the e-mail it is clearly written and my mistake.	s i(t) insufficient CA/OC that led to not identifying the design flaw.	(1) Equipment Environment Not Considered A design review by DED and the gasket SME revealed E-1411 is succeptible to low gasket sines and subsequent leakage it; once heated up, the shell section is caused to cool greatly and apidity with respect to the charmet section. In this case the shell flame will contract from cooling while the stude will say too (and thermally expandad). This differential growth can greatly lower the shud doud imparted and allow gasket backing to contain men.	(f) Equipment Environment Not Condidented. A design review by DED and the gaskest SME revealed ET-41 its susceptible to low gasket sires as and subsequent leakage if, orce heated up, the shell section is equied to cool graphy and reploy with respect to the channel seedion, in this case the shell flangua will centrast from cooling while the stude will sent set to a cooling while the stude will centrast from cooling while the stude will sent set to a cooling the stude of	•	(i) Reot Cause: Work package / Permit NI Causal Factors (irom TapRot Cause; Work package / Permit NI Causal Factors (irom TapRot Analysis): 1-Chitical lift plan not in place 2- And designated spelter for boom position 3-Chround man stiteopts to edimb on right rear of erans fruck to help inventa with pole 5- Ne mitigation and SPAC NI Causal Factors (from TapRot Cause). For Communication of SPAC NI Causal Factors (from TapRot Analysis): 1-Chitical lift plan not in place 1, 61 Root Cause; Frey bib briding NI Causal Factors (from TapRot Analysis): 2-No designated spoter for boom position 3. Ground man attempts to climb on right rear of crore truck to help illnowner with pole 4. Crore truck to perform truck to help illnowner with pole 4. Crore truck to receive the communication of boom should retracting the was unclear of the position of boom. S- No mitigation taken for 12KV thess, (5) Root Cause; To Supervision during work Causal Factors (from TapRot Analysis): 3. Ground man attempts to climb on right tear of crare truck to help international communication of the communication of the communication of the communication of the position of boom without retracting, the was unclear of the position of boom without retracting the whom Engleton rather than his missed boom without retracting the was unclear of the position of boom.  (a) Reot Causer thuman Engletoner states that for missed boom without retracting, the was unclear of the position of boom.	(1) Work process tallure allowed pump to be installed without valve. (2) Operator Fasted to identify the sisk that the system may still be under pressure regardless what was was shown on the pressure aguage.	tested prior to installation and commissioning into service. Sometimes boils, screws, and other ports can be jostled during the tensportation process. These parts need to be verified in the field before installation.

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	36686	36885	36641	36637	36623	36805	38805	36601	36001	38571
	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmend, CA - 36641 Relinery	Richmond, CA - Refinery	Richmend, CA- Refinery	Richmend, CA - Refinary	Richmond, CA - Refinery	Richmend, CA - Retinery	Richmond, CA Refinery	38571 Refinery
	4/21/2012 6:30:00 AM	4/25/2012 4:00:00 PM	4/29/2012 12:00:00 AM	4/29/2012 6,00:00	4/28/2012 3.00:00	4/27/2012 9:12:00 PM	4/27/2012 9:12:00 PM	4/27/2012 8:30:00 PM	4/27/2012 6:30:00 PM	MA
	investigation in Progress	Ciosad	Closed	Ciosed	Closed	Closed	Closed	Closed	Closed	Closed
	Near Loss	LOSS NOBL	Loss	Coss New New New New New New New New New New	Nøs.	Loss	Loss	Loss	Loss.	500
	A/C fallure caused hi temp in Server Room	Changing Defstan additive, inconsistent information from HES or if this needed permitting	Visible flame from NISO	2.5° guide bar for Iha mooring line guide broke off and few forward about f 20' nearly Hiting an	13 FC017 was suppose to be closed 4.9 but was open + 6.9	Firefighter hit in mouth by hose coupling	Firefighter hit in mouth by hose coupling	Employee got sunscreen in eye	Employee go! sunscreen in eye	Loss totalizars
Was advised on April 26, 2012 that an Anpa invoke from a Stending Contract Vender wee paid on April 4, 2012 and contained an over-billing error (Office Manager position was included in invoice, but Master Contract specifically	A/C failure caused hi temp in TC320 Server Room - On Saturday 4/21 at 6:30 in the morning the A/C unit in TC320 failed and shutdown. This caused the emperature in the room to exceed 100 degrees. The servers in the room shutdown due to the hi temperature in the room. FOS was not notified of the hi temperature in the room. FOS was not notified of the hill temperature in the room. FOS was not notified of the hill temperature in the room. FOS was not notified of the hill temperature in the room of	DAR would ske to switch from EC5208N to EC5208A additive for Detsian/JP-8. This material is more readily available and more cost-effective. This material was approved to bring in to the JHT through the RI313 process which included tenvironmental sign offs, this review occurred in the summer of 2011. The ABU proceeded with ordering a fruck of this material. However, when the environmental group perform a review during the MCC review process, it was determined that the natichalens content of the EC3208A material would require a health risk screen or permitting through the BAAQND. The MCC was reviewed by different people in the Environmental group than the RI313.	NISO Fiere had a visible and some smoke at 2PM this effernoon. No totalizer the occurred. Believe it was condensed light ends from NISO blowing down E-757 when it stated that thigh Elever down again this morning at 8 an. Light ends also causing P-283's to gas up operations working through that issue.	On April 29, while lying-up the vessel Eugene in Berth #4, the mooring line hanged up on the ferdier chains, the operator puls a 8 third warp on the mooring wench. One of the two Operators attending to MK405 was between the vessel and the mooting wench; but not in the tine of fee. After the Operator resumed pulling the mooring when, the guide but snaps and dies 20 feet before failing over the Sertin and into the water, narrowly missing a second operator that its positioned on the berth to assist the berthing. When the guide but show, the pope flipped-up and bourced towards to the operator attending to the mooring wench and stock thim on the critin. Was evaluated by Plani Protection and rehumed to work without restrictions.	During the start up of the Bulamer plant, C-1320 everhead pressure increased from 200 psig to 300 psig (Normat), Flow through FV017 increased to 104 bpd to E-1301 and the exchanger over pressured acressed on E-1301 and the exchanger over pressurized at 350 PSIG and filted the PRO BU-1303 to the ratef vessel V-1360.	Firefighter was deploying firehose (#1 precennect) from fire engine (Foam 60). The nezzle coupling of the fire hose struck firefighter in mouth area, causing the loss of two ( top front) dental implants.	Firefighter was deploying frehose (#1 preconnect) from fire engine (Foam 60). The nozze coupling of the fire hose stuck frefighter in mouth area, causing the loss of two ( top front) dental implents	Employee het used sunscreen on face and accidentify got some in her eyes. Chevron fire was called and respondes. Employee was feeted by chevron fire utilizing eye wash to clean her eyes. Employee was then refeased to return to work.	Employee had used sinscreen on face and accidentilly got some in her eyes. Chevron fire was called and responded. Employee was iteated by chevron fire utilizing eye wash to clean her eyes. Employee was then released to return to work.	орел.
	NL- Equipmen/ <i>Property</i> Connege Equipment	NL-Regulatory Compliance - Non Compliance - Air	Operational Process/Procedures	NL-Injury/Iliress - Employee injury	NL-Operational Process/Procedures Safety Systems	ใก ury/liness	NL-injury/litaess - Employee injury	NL-injury/likness - Contractor injury	injuy/iliness	Process/Procedures
(1) What: \$10 K over-billed for Office Manager, which isn't a billable position according to the Vender/Chevron Contract, Why 1: Billed Office Ninger because vendor's Timekeeper received vental instruction to bill the Office Mgr, then vendor's billing system penerated "nor rate to match" error code.	(1) The monitoring on the 3rd floor server room was not set up prosperly so that the FOS office received notice when the high temperature limit was reached. Why? We have not recently had an issue with the ACC end temperature alarms in that room. Apparently It has not be set proporty for quite some conducted. Why? On setup, no besting of the system was to dote mind, the high temperature alarms the tone of other than the system was to do determine at the high temperature.	(1) The SWhy investigation is here: https://collab.001- hou.sp.chevron.net/sites/dagmifgoest.PSO.ut/RIDocLb/SVhy%. 20raport%20Netco%20Aoditive.docv.The RI313 database is lacking tinggers for doing HRSA review. (2) Specialist was rutinod on HRSA reviews, but did net camplete one for this chemical	(1) Why NISO flare had visible flarming? Light ands in Flare base liberated dump heat or the day Why were light ends in the flare base? Light ends in the flare base? Light ends in the flare base acrae from NISO blowing down E-757 due to it being percleved to be suited Why die E-767 seemed to stall Because the column was actually floreded and the column has no delta palarm. Ops was not awere of the flooding in the column.	(1) No formal inspection of the guide bats conducted., (2) Additional consideration: Portion of guide bat final extends out from wench plate is not reinforced, (3) Additional consideration. The severe corresion / deletionaled condition of the guide bats were not highlighed during routine inspection, (4) Additional consideration. Risks was not hilly recognized and exposed the Operator on the line of fire while lying up the ship.	(1) Operator failed to confirm the set point input to ensure the proper entry was made into the DCS. 1. Why did *20-bot happen? The pressure increased on E-1501 2. Why did *1' happen? FVO!? flow increased to 104BPD to E-1501. 3. Why did *2' happen? 13FCO1? was still open 6.5% (Should have been 6.5% por procedure). 4. Why did *2' happen? Operator extended to enter 5.5% and addustly entered 6.5% into the DCS. 5. Why did *4' happen? Entry was not checked by operator to ensure the correct entry was made into the DCS. 6. Why did *5' happen? CSD made the occard entry and the keyboard and assumed it was correctly entered but didn't keyboard and assumed it was correctly entered but didn't late steps to confirm the screen 7. Why did *5' happen?	(1) 1) Praconnect hose loops were not long enough for firelighter to grob the hose from the ground level., (2) 2) Nozzle wasn't secure or placed toward the middle of the crossley.	(1) 1) Preconnect hose toops were not long enough for firesignler to grab the hose from the ground levet, (2) 2) Nozale wasn't secure or placed toward the middle of the crosslay.	Penspiration caused sunscreen to run into eye. Person didn't realize sweat was running down her forehead into her eyes.	<ol> <li>Perspiration caused surscreen to run into eye. Person didn't realize sweet was running down her forehead into her eyes.</li> </ol>	breakdown.

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	36973	36966	36940	36930	36908	36866	35863	36850	36793	35784	36769	38734	36706
Richmond, CA		Richmend, CA - Refinery			Fichmend, CA- Refinery	Skchmond, CA - 36866 Refinery	CA - Refinery	36850 Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery
5/3/2012 6:30:00		4/30/2012 10:00:00 AM 5/2/2012	2:00:00 PM	5:00:00 AM	5/2/2012 11:24:00 PM	4/25/2012 9:00:00 AM	3:00:00 PM	2:00:00 PM	5/1/2012 10:30:00 AM	4/30/2012 7:39:06 AM	, 4/26/2012 9:00:00 AM	, 4/26/2012 5:00:00 PM	t, 4/26/2012 3:00:00 PM
	Closed	Closed	Clased	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Cinsed	Closed
Z eg	<u> </u>	C S S S S S S S S S S S S S S S S S S S	- Ess	Zoss New New New New New New New New New New	L Nege	Loss Ness	Near Loss	Loss	loss .	Near	Near	Negr Loss	505
Aqueous centrale water leaked from portable fractark to secondary asphalt containment in Haz Waste	Missod InteleTrac Duly	Green Card. Found liquid leaking down rus gas line. Location: DER 4Cat	PARTICAL IN EYE	Missed inteletracif Wharf Lab / Program error	V-730 filed over top causing flow to Aky Flare of 7 scrtd	overhead sleam leak, r Location: S, Isomax F- 33DIF-320				reeds route could rester if replacement, Location; s Bidg 214		Missed intelates round or CFO 4/26 rightshit. No exception entered	\$10K worth of Contractor Billing Errors
A slate of shift, contractor noticed quantity of water with oil streen was pooled around the contintings work area in Haz Waste Annex, Water appeared to be leating from underneable a packable lank containing centrate water failanded for pump off to 1A Separator. Estimated no more than 40 bblis water leaked. Oil		Green Card. Found iquid leaking down fuel gas line, Location: D&R 4Gat	MECHANIC WAS YORKING IN HIS AREA WELDING AND GRINDING. ANOTHER EMPLOYEE CAME TO ASK HIM ABOUT A JOB. HE STOPPED WORKING AND FELT SOMETHING ENTER HIS EYE.						Company EE aggravated prior non-work related injury to right hand while swingling a hammer. EE was working on K-1171A cylindor repeirs. EE seen ol ciric and release to personal physician.	Green Card, Tried to bump lest 2 H2S monitors at Bidg 214 Bump Station and they both failed. I want to the fire station and tested the same 2 monitors and they both passed. Location, Bidg 214	contractors (supplied by their company) to bed realy worn. This is a saley concern in case of reaces. Will it provide enough nobition time to allow for rescue? What is the like speciatory of FFD'93 Are they being used correctly and maintained appropriately? Location: What NITIAL DESCRIPTION; SEE LINK ATTACHED IN INVESTIGATION FOR COMPLETE TOP REPORT.	altempted to develope the complete instrument of minds for AZS nightahft and altempted to developed them shortly effer indight because there were only 2 functioning units for the fa8 section that evening. The CFO operator was thing to ensure that everyone would have access to a handhad unit prior to the end of shift. The dewrinesd failed to reflect rightshift and instead showed up as a false round to \$250 dayshift. When the Head Operator went to approve the round it would not deer. The sheat Operator was not clear on the requirement to enter a conscience action a conscience action a conscience action to before the and of shift.	prohibits this). Upon further review, discovered the included an occupying this Office Macager position was regularly peld in Maximo in early 2011 as a higher pay grade Craft Apprentice (this individual rever worked as a Craft Apprentice and was always and Craft Apprentice). Maximo craft code was charager). It was also baseryed that this individual's Maximo craft code was charaged from the Craft Apprentice code (when it was individual's individual's as the Craft Apprentice code (when it was individual's as the Craft Apprentice code (when it was individual's as to longer individual in involces until the fore-monitoned April 4.  2012 billing.
NL-Environmental -	Business Process	NL-Environmental • Operational Leak	njury/liness	NL-Business Process	NL-Regulatory Compilance - Non Compilance	NL-Environmentat -	NL-Injury/lihess - Contractor Injury	NL-injury/ilheas - Contractor injury	โกรุ่นารภิฟิกธรร	NL-Lessons Learned	NL-injuryilliness - Contractor injury	NL-Business Process	Business Process
	(1) Understanding on the monthly duty is less than adequate.	(1) SOS; trainto & Procedures (Communications & Lossons Leanney): Liquid Observed Lawking Out of Fuel loss Line. Centred Mechanic in Area made observation and reported II. to operations and supervisor, as expecient Operations (revestigated and found liquid liguage beating onto hell gas time. Share non-event real loss to encourage reporting of potential hazard with confractors and operations.	(1) DID NOT SEE THE HAZARD, OR THE NEED TO LEAN FORWARD	(1) Lock of undersianding of inteletrac roles & responsibilities by Operator / Head Operator					(1) Company EE aggravated prior non-verix related injury to right hand white a winging a harmer; why did above happen? 1. While the EE was undoubsity engaged in productive work the EE should fould have befor utilized his LPSA for promoted risk assessment white awaying the seedge harmer and taken it upon himself to take a break and or harmer and taken it upon himself to take a break and or harmer and taken it upon himself to take a break and or		(1) Nol given PFD User's Manual, (2) Nol given instructions on how to inspect PFDs, (3) Rt-380 is not clear on PFD training expectations, (4) Tix equipment in disrepair	80	Overrade this error code by choosing a different rate. Why 2: Overrode ornor check with a different rate because wordors. Timesteeper was familiar with the pre-2010 capital Confract and coupled with the verbal instruction to bill the Office Mgr. Why 3: the Timesteeper field it was okay to bill the Office Mgr. Why 3: Researching the cause of the system error code would stay when the sand over-riching the error code in this manner has unusally been the high thing to do.

https://impacterm.chevron.com/IMPACT/ANYWHERE/Reports/exports/scenario_159134_f8a5390b-1e90-4874-b012-4d17412a3a40.htm 8/9/2012

	37140	37118	37115	37115	37067	35977
	Richmond, CA-	Richmond, CA -	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA.	38977 Refinery
	664Z012 8:00:00	5/5/2012 1:00:00	5/7/2012 7:30:00 AM	5/7/2012 7:30:00 AM	5,42012 5,40.00 PM	MA
	Closed	Closed	Clased	Closed	Closed	Clased
	L083	loss .	Loss	Ssor	5 es	Logs
	K-300A loss of labo cil to ashall grade resulting in K-300 A and B shuldown.	backed into a yellow pole in the gravel by our near DHT.	Vehicle backed into overhead electrical extention cord	Vehicle backed into overhead electrical extention cord	D&R totalizer tip & possible failing due to high level in V-1660	Loss Amox erea
	Operations discovered lube oil escaping for K-300A gearbox vent and besting lube oil return oil vents.	EE was called out after hours on an instrument job for D&R on Friday night 5-4-12, the backed into a yellow pole in the graval fut out near DHT, it was about 1:00 AM when this occurred. He was off work on Saturday 5-12 for company convenience due to the time the jeft the refinery on Saturday moming	Contractor vehicle backed into a new installation of an overhead electrical cord. (Was in process of cleaning port-a-polity)	Contractor vehicle backed into a new installation of an overhead electrical cord. (Was in process of cleaning porta-polity)	D&R totalizer trip & possible flaring event due to S/D of K-242 & 252 caused by a high level in V-1050, V-1050 currently had this/numenciation issues on 16L-C 051 earlier in the day as control valve was in manual operating mode.	sheen only, so hydrocarbon estimated < 1bb).
	Enviormental	Transportation	Transportation	NL- Equipment/Property Damage - Equipment Damage	Environmental	Spill
(1) 'FIVE WHY' One Page Report Incident Number #37140 Business Unit Cracking Location Richmond Facility Name	(1) At 06:00 on 5/3 operalism discowered oil escaping out the atmosphario vents on K-200A gear box and bashing vents. The compressor was immediately shuddown. The likely scenario is that the seel oil traps lailed blowing natural gas into the tube oil measured; put he rearvoir enough to prevent the atmosphario drains on the gear box and bearing from draining back to the reservoir enough to prevent the atmosphario drains on the gear box and bearing from the starting and gearbox until oil began spilling from the variet. We have instructed operation to keep the seal of return time blocked in back to the tube oil reservoir. Operations will monitor and manually drain the seal oil trey less necessary. An earlier best indicated that the seal oil trey level is measured, or a relief test indicated that the seal oil trey is servoir of the fubble oil reservoir. Why did the design and the period of the fubbe oil reservoir of the fubbe oil reservoir. Why did the design as the fubble oil reservoir. Why did the searvoir of the fubble oil reservoir of the fubble oil reservoir. Why did the searvoir of the fubble oil reservoir of the fubble oil reservoir. Why did the searvoir of the fubble oil reservoir of the fubble oil reservoir. Why did the searvoir of the fubble oil reservoir of the fubble of the fubble oil reservoir of the fubble oil rese	(1) FIVE WAY* One Page Report Incident Number 3118 Bulleness Unit DRR Location Richmond Fosility Nume Incident date 5/5/2012 Type of Process: Type of Equipment ream Members. Tony Vink Sylvia Bellett Incident Description: What IAVA Where (location or where in the process): DHT When 5/5/2012 150am How. Backing truck up. Problem Stelement (What is the key Issue in an oeds to be addressed?): Backed Incik Inio e yellow pole in the gravel lot out near DHT. FIVE WHYST. I. Why did "above" happen? Conditions changed from day to night, did not do a walk around truck before teeving. J. Why did "2" happen? Long day ready to po home. 4. Why did "2" happen? S. Why did "4" happen? A. Why did "5" happen? S. Why did "5" happen? S. Why did "6"	(1) Area was not eccessed properly to identify risks of running cord overhead	(1) Area was not accessed properly to identify risks of running cord overhead	(1) "FIVE WAYY One Page Report Incident Number Business (1) "FIVE WAYY One Page Report Incident date shaft? DRR Leadion Facility Manne Richmont. Team Members: Soot Kewahara Bill Yessalo Incident Description: What: Totaliser tips & possible faring event due to K-242 & 262 hipping due to e light liquid level in V-242 ta singe KO drum which may have that possible faring where: DHT Plent When: 54/12 @ 17-40 How. Bat instrumentation values on V-1600 via level transmitter via 6LC061 reaulising in liquid carry over rino 1st singe KO V-242 Both level controllers in manual carried into shift change and at time of K-242-252 (ip. Problem Stakement (Whatis is the key issue that needs to be addressed?); 16LC061 to be repaired, FIVE WAHYS 1. Why did "above" happen? 14C061 is the key issue that needs to be addressed?); 16LC061 to be repaired, FIVE WHYS 1. Why did "above" happen? 14C061 is the key issue that needs to be addressed?); 16LC061 to be repaired, FIVE WHYS 1. Why did "above" happen? 14C061 is the key issue that needs to be addressed?); 16LC061 to be repaired, FIVE WHYS 1. Why did "above" happen? 15C061 to be repaired, FIVE WHYS 1. Why did "above" happen? 2. Why did "above" happen? 3. Why did "abo	

https://impacterm.chevron.com/IMPACT/ANYWHERE/Reports/exports/scenario_159134_f8a5390b-1e90-4874-b012-4d17412a3a40.htm 8/9/2012

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	37201	37196	37187	37187	37150	37149
-	Richmond, CA - Refinery	Richmond CA - Refinery	Richmond CA - Refinery	Richmond CA - Retinery	Richmond CA · Refinery	Rechmond CA -
	323/2012 12:00:00	5/7/2012 10:00:00 AM	5/4/2012 10:00:00	5/4/2012 10:00:00	5/7/2012 2:00:00 PM	502.2012 8.00.00
	C iosed	Closed	Closed	Closed	Closed	CLbsed
	New	Loss	Coss Near	Near	Loss	Noar
	Exceeded compliance dus date for PHA edion tem 1725 for RLOP K-1800 r KO drum level	Green Card, Repaint parking stripes, Location: 91 Gate • Main Lot • Peas Control Side	Power supply unit for a DCS HM module mailluntioned, resulting in temp loss of process data.	Power supply unit for a DCS HM module mailuntoned, resulting in temp loss of process data.	Worker accidentially hit thumb with a hammer white constructing concrete forms.	
	PHA action liem 17235 due data of 3/23/12 exceeded. Added man hours required for HES to work with the county to extend the due date.	Green Card. White parking stripes are not visible during wet weather. Repairt stripes. Location: 91 Gale, Main Lot, Pass Control Side	At around 10:00 PM on 5:4412 at the 13-EE Cogen control room, the History Module on the DCS system was "reset" (like a cycle power command), from a passibly from a mathineticning power supply forcing it to a "Power On" state, rendering it inoperable. This caused the loss of historized process data (trendral), followed, soon after by "severe" statems on 1 through 4 operator Gus statens as at they reported less of communications with the HM.	All around 10:00 PM on 5/4/12 at the IEEE Cogen control room, the History Module on the IDS system was "resel" (like a cycle power command), from a possibly from a mattundsoning power supply forcing it to a "Power On" state, rendering it inoperable. This caused the loss of historized process della (frending), (sidowed, soon after by "severe" slatms on 1 though 4 operator Gus statems as they reported loss of communications with the HM.		Inspections noticed the 3" fine in SGRU pipe way was bowed out of position. Inspection notified Opa. That he thought a gasoline line was damaged, it was discovered the 1SDECUT GASO fine was bowed in the pipe way cutated by the SGRU boundary beading east. DED was called, it was determined the line had grown afmost 30 incites in the north/south direction, bending the east/wast section of the. Soveral ½" condensate lines hanging from supports of the north/south run are also bank. DED determined the north/south line expension was due to themsel growth. Steps calculations were completed by DED and determined the north/south run are also bank. DED determined the north/south line expension was due to themsel growth. Steps calculations were completed by DED and determined the filter was not imminent. A review of MOC 21949 Removing the side out gase occioes notioned to increase temperature at the pumps, with no change on downstream piping.
	NL-Regulatory Compliance - Non	NL-Transportation - Contractor	NL-Operational Process/Procedures - Safety Systems	NL-Business Process	injury/Ikness	NI- Fequipment/Property Damege - Equipment
(1) Loss: Conductivity off-spec. Why? Not enough	(1) Near Loss – Potential for fines from the county for PSM non-compliance. (1) Why the potential for a fine? Because is PHA action liem due date was exceeded. (2) Why was the date occoded? Because is the project was not standed any execution to exceeded? Because the project was not standed any exceeding the standard and year of the project standed early enough? Because the project standed early enough? Because an IEE engineering fresource was not available to start the project earlier. (4) Why were resources unseveilable? Because the IEE Load Engineer (ma) did not vessits: a concern about a men power shortage to meal both the RLOP TIA staffing needs and PSM complainned intens. (5) Why didn't the lead engineer vice a concern about staff shortage? Because the thought standing the PSM complainned imap to this the allocated of the CSM complainned intens to the project by the due date. (5) Why did the lead engineer think he allocated enough time? RCF – lock of knowledge reparting how big of a confineder should be allowed to address, unexpected decreases when planning for jobs with firm due dates.		(1) Hnoeywell History Module (HM) felled Why did HM fail? It appears to have failed due to a loss of power Why did the failure seem to be relate to a powere failure? The failure seem to be relate to a powere failure? The failure in the Power On state after the failure.	(1) Hnosywell History Medula (HM) falled Why did HM fall? It appears to have failed due to a loss of power Yatry did the fallure seem to be relate to a powere fallure? The fature seemed to be related to ose of power because the node was in the Power On state after the failure.	(1) Failure to focus on leak at hand	FCC incident date 62/1/2 Type of Process: SCC Gasoline Type of Equipment: Piping Team Members: Laure Leeds Brian Scale Hale Typen, Josh Buchanen Turn Warkhat Karla Saloman Scale Hale Typen, Josh Buchanen Turn Warkhat Karla Saloman Mark Materns Incident Description: Inspections noticed the 3" treat in SGRU tops way of the FCC was bowed out of position. Inspection rollifed Ops. That he stought a casoline in was downed in the pipe way outside the SGRU boundary leading seast. This investigation covers why the life was bowed out of position. Inspection rollifed Ops. That he stought a casoline in was damaged it was discovered the SIGRU boundary leading seast. This investigation covers the thermal growth of the 1035's of piping. 2. Why did "1 happen? The thermal growth of the 1035's of piping. 2. Why did "1 happen? The wast bowed out of position due to the thermal growth of the piping coursed due to the piping ordinally optended at 100 deg if where thermal expansion would only have been 3-4" of growth one first tenpin from ambient conditions. However, in 2010, the openaling formprendures were increased to 350deg if where thermal expansion could be 23" over that tenging from embent or an expected to 31. The bening forwh of the piping occurred due to the piping being constrained ower the 1035' of piping being constrained and both onds of the pipin wastern or the temperature according of the pipo way silowing for only 2" of growth of the piping occurred due to the piping stream included relative of pointial toxoprosease according of the piping biping only and the piping stream included and work of pointial toxoprosease according of the piping biping only and piping

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	37354	37354	37346	37345	37344	37326	37203	37292	37291	37288	37229
Richmond, 5/6/2012	Richmond, CA -	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinary	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery
5/6/2012	5/10/2012 12:00:00 AM	5/10/2012 12:00:00 AM	5/8/2012 12:00:00 AM	5/10/2012 8:10:00 AM	5/8/2012 12:00:00 PM	5/8/2012 4:30:00 PM	5/8/2012 6:30:00 AM	5/2/2012 7:45:00 AM	4/28/2012 10:00:00 AM	4/28/2012 10:00:00	5/7/2012 10:00:00
	Closed	Closed	Closed	Closed	Closed	Closed	Closed .	Closed	Closed	Closed	Closed
	Near Lass	Near	Coss Loss	N ear	Near	Coss Toss	Near	Near Loss	Near Loss	Loss Seat	Near Loss
Green Card. Overhead steam leak down to	T-950; off test product sold on pipe line.	T-990; off test product sold	T-991 failed cartification because the gas blender comparator engines were not properly resal after routine maintenance	Driver of a truck gats out of a running vehicle to have a reconversitation with another person in a readway.	Green Card - Contractor noticed tow hanging wire on patroitie street	Crack in FCC South GRU	Green Card. The crosswelk is poorly III. Location: B&S (Main St) T125 Geto	Green Card, Someone Irled to cross the barricade I tape. Location: D&R F- 3590 Washdown Station	Green Card, Platform grading has rust problems Location: 7:992	Green Card, Bracket r screws are rusty, Location: 17-992	PMI Cargo Teesta Spirit Conductivity Off-Test
	Premium gaseline from T 900 was cet to sell on the 80y Arce Pipe Ine (BAPL). Operations noticed that the routine pipe line semples did not match the Certificate of Analysis (COA). Check samples were pulid on the tank and pipe line as well as the retained sample from the CAA. The pipe line and that samples were constitued but differed for the COA and retained sample. T-900 continued to sell after 23:00 when we were aware that sample results exceeded the ciloted 5. differential for gravity between the COA and the pipe line samples.	Premium gaseline from T-990 was sot to sail on the Bay Area Pipe Lina (BAPL), Operations noticed that the nourine pipe in a semples did not match the Certificate of Analysis (COA), Chock samples wore pulled on the tank and pipe line as wall as the entance sample from the COA. The pipe line and tank samples were consistent but differed for the COA and related sample, T-390 continued to sell after 25:00 when we were aware that sample rasults exceeded the ellotted. 5 differential for gravity between the COA and the pipe line samples.	INITIAL DESCRIPTION: SEE LINK ATTACHED IN INVESTIGATION FOR COMPLETE TOP REPORT. Gas blender comparation engines were not properly reast after routine maintenance resulting in 1-991 failing certification. The tailed certification requires check samples to be sent to en alternate source for varification which in turn causes a delay in acquiring a certificate of enaltysis.		While criding on petrollis sleet, noticed low hung wire, got in contract with Chevrion Safety, who in return contracted Plant Protection and the stectrical personal.	Cracking insepctions discovered an appoximately 2" long crack on the FGC south GRU relief header.	Green Card, While chiving on Mein St., I barely sew a pedestrian crossing the street from T125 (lumstile). The crosswalk is poorly it aspecially in the meming. Location: B&S - T125 Gate	Green Card. While doing a steam deaning in the ground with barricade tape, somebody tried to cross the barricade tape. Location: U&R F-3550 Washcown Station.	Green Card. At the top of the stahway on T-992 the grading on the platform has some serious nutl problems. In some areas completely gone, in other areas do to 75% rusted out. Then an iterated going down on the 4th step before the second light on the stairs on the underside of the handrall, it is nusted out 3x4 width by 1 1/2" long. Serious problem if you grab handrall inter without grove are, could get islanue. Make sure you get your shets firet, that way it won't be a recordable, just a first ald. Location: T-992	Green Ceat. On T-992 from top of lank on stater fest light pole over stairs is secured to a channel flange (gatvanized) support brace. The screw that geas through both sides of the brackets that are secured to channel brace is not stalinities and has nusted out (about 85%) simost completely. Extremely high whole mok light back and forth constantly. When both breaks, it will cause light to fall and poss:biy hurt someone, Not it but when (soon) due to location (scaleled). Probably no one will get hurt (Do you fee) tucky?) Location. T-992	A lotal of 285 MB of high density diesel was loaded for PMI on the Teesta Sprit elaiding May 4th at 2:00 and enting May 7th at 12:30. During the load conductivity additive was thought to be injected to a stoppl of 0.20 gat/MB to meet the conductivity specification of 100 parts. However, following the departure of the ship the inspector, inspectorate, reported that conductivity of the versel composite sample was only 37 pc/m. The material loaded mot all other specifications.
	NL-Quality • Product Quality (Int)	NL-Quality - Product Quality (문제)	시L-Business Process - Business Process	NL-injury/liness - Contractor Injury	NL-injury/itness - Contractor frjury	NL-Environmentel - Operational Leak	NL-Transportation - Company	NL-Lessona Learned	Ni-Lessons Learned	NL-Lessons Learned	NL-Quality - Addilivo Injection (Ext)
	(1) STL did not use Stop Work Authority to shutdown T-850 goling to the BAPL wont though the BAPL had given permission to keep it going. Not sware that we can refinal tank with a new batch hunder.	(f) STL did not use Stop Work Authority to shuldown T-990 going to the BAPL even though the BAPL had given pamission to keep it going. Not sware that we can refinal fank with a reav batch number.	(1) SOS: Training & Procedures: Oil change was not in the delity orders. Other operators assumed the operator was savere of the weakly job duly, Assumed operator had switched the engines to run after the mochanic.			(1) 2. Inspection strategy and inspection points were not adoquate for predicting this corrosion/feiture., (2) 1. Relief line is part original design ate.					conductivity additive was injected. Why? Monitoring of the conductivity additive highdion rate was not sufficient. Why? Procedures do not specify to monitor the lank layed frop during the load to verify the amount of additive injected, (2) Loss: Conductivity off-spec, Why? Not enough conductivity additive was injected. Why? Monitoring of the conductivity additive injection rate was not sufficient. Why? The prince conductivity may be injected to the conductivity additive injection rate was not sufficient that the additive injection rate was loo low.

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	37512	37503	37484	37491	37487	37385	37384	37383	37382	37381	37380	37376
Richmond, CA -	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA -	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	37376 Refinery
Richmond, 5/13/2012 CA - 11:02:00	5/13/2012 9:20:00 AM	5/12/2012 10:10:00 PM	5/12/2012 2:45:00	5/12/2012 8:00:00	5/11/2012 11:50:00 AM	5/9/2012 1:30:00 PM	5/9/2012 2:30:00 PM	5/9/2012 12:45:00 PM	5/9/2012 11:00:00 AM	5/9/2012 12:00:00 PM	5/8/2012 12:00:00 PM	4:00:00 PM
	Closed	Closed	O o o o o o o o o o o o o o o o o o o o	Closed	Closed	Closed	Closed	Closed	Closed	Clased	Closed	Closed
Near	Near	Loss	C N C N C N C N C N C N C N C N C N C N	COSI	Loss	Near Loss	Near Loss	Near	Near	Near	Near Loss	Loss Year
Trip of the RLOP intelizer and flaring on the RLOP	F-1500 and F1550 minimum fre tipped	Lost HNF bottoms pump due to ground faut at RLOP sub station.	While performing F-731 Wanual SID Quick Test (ISQA7589), F-731 word to min fire.	r Major Vesuum Leak on 1 Tetra Ethyl Lead System	Plant shut down work and equipment failure.	Green Gard, Steam leak, Location: S. Isomax D-1020	Green Card. Loose (ce board needs welding. Location: \$1\$O K-1060	Green Card, Fumes from grinding building up in the shop, Location; 3Dist Weld Bay	Green Card. No spoller, r Almost ran into a forklift. s Location: Powerhouse	Green Card. Possible r dehydration, heat stress. Location: Refinery	Green Card. A valve on burner #26 was leaking. Location: JHT F-247	welkway, Location: SISO K-1000
The RLOP totalizer was tripped and there was visible flare. The source of the flow appears to be from RLOP via V-1970. This might be associated with the	F-1500 and F-1500 lumaes tipped to minimum file, due to loss of air flow. Cause by \$45 beater up at fled mounted destricts pennal No. 1-dq-80 coulded at standshipn 31F. Breaker \$415 feeds current to F-1500 Combustion air flow (856700 & 856708 A. and 65ff708B) and to f-1550 Combustion flow (85ff742B).	Lost HNF bettoms pump P-1835 due to ground fault at RLOP sub station. This use of flow caused F-1850 to go to that injo Goord fault deared and pump put back the don link. F-1850 was resitied for light of thy CFD and burners put back on. Products were routed off test for an hour while plant was restablized.	While performing F-731 Manual S/D Quick Test(ISOA7683), F-731 wont to min	INITIAL DESCRIPTION: SEE LINK ATTACHED IN INVESTIGATION FOR COMPLETE TOP REPORT. After making the TEL militar connection the system was being checked for xecurni lests, end it was discovered during this process that, the referred flarge connection was slightly cocked just concept due to the restricted sprocket exists or the temporary connection to pinch only one side of the fange face. This produced su unavers this (flenge connection) which leaked vacuum. The system was only able to establish 10 hg of vacuum due to the fase on a system that typically builds and hold 25 hg. This was a significant teak.	1.K900A hydrocem felled, compressor quit pumping. 2. No working flow meters on HEL Line H2 made it discuil to control losding and flow. 3. K350 discharge safely flated, fitting prematurely. 4. Relief system overloaded during a Rhan depressuring.	Green Card. A steam teak at a fiting needs to be fixed. Please send someone out to get a look at it. Location: S. Isomax D-1020	Green Card. A loe board next to the steam teak is toose and needs some work to the best into the deck, tocation; S. Isomas K-1050	Green Card, A worker was orinding/cutting in the shop. Furnes from the job was building up in the weld bay. Locaton: 3Dist	Green Card. Three man in a vehicle didn't use a spotter and aimpst ran into a forbill. Location, Powerhouse	Green Card. It is starting to get really holf Possible dehydretion and heat tires. Location: Refinery	Green Card, I found a valva an burner#26 was teaking. Smelled fuol gas.	Green Card. Overhead steam leak down to walkway needs to be fixed and needs scaffold to get to the teak, Location; S. Isomax K-1000
NtRegulatory Compilance - Permit	NL-Operational Process/Procedures - Safety Systems	Operational Process/Procedures	NL-Operational Process/Procedures - Safety Systems	NL-Environmental - Operational Leak	Envirormentat	NL-Environmental - Operational Leak	NL-injury/länass - Contractor Injury	NL-Lessons Learned	NL-Transportation • Contractor	NL-tojury/läness - Contractor Injury	NL-Environmental - Operational Leak	NL-Lessons Learned
(1) Flaring was associated with engoing RLOP S/D activities. Crews were communicating with SiSO on norm at FGR. The last move to increase flow to relief was made at 10:50 pm. For some reason that can not be explained, 12 minutes later, FGR overpressured. All investigations could not determine	(1) Heavy S/D adikity in area of the panel likely feed to excidental thepring of the circuit breeker. Cricuit has been checked and no issues with the circuit can be identified.	(1) No reason found for trip or fault. Have had no rescurrance		(1) Missignment between ratear and loading arm sanges due to arm not being stexible and hitting the platform railing, (2) Eductor and Pump do not meet design flow rates	(1) PRD lifted early							

Richmond, 4/8/2012	Richmond, 5/16/2012 CA - 7:30.00 37755 Refinery AM Closed	Richmond, 9/11/2012 CA 12:00:00 37729 Rafinery AM Closed	Richmond, 5/15/2012 CA - 12:00:00 37673 Refinery AM Closed		Richmond, 5/12/2012 CA 12:00:00 Grannery AM Closed	Rehmond, \$10/2012 CA - 8:30:00 37856 Refinery AM Closed	Richmond, 5/14/2012 CA. 950/00 Closed
	Near No MOC created for Loss Change of tank service	Near Loss Addilive shorlage	Near Loss Lost LOTO box key	Notification not given to Near HES prior to stopping Loss Bioreactor aeration	Umpredictable than Hydrogen balance with 6 Cef and NHT S/D's Near resulting in unpredictable Loss jet and diesel production.	Transported P-124 from 465 pietrom to the machine shop without the Near shipping to gompletely Loss filted out.	SISO Booster Deck Overhead Centry Crane was being positioned at K- 910 when during this process the calwalk made contact with previously staged scattoding. This ben'ther vertical sleging ben'the vertical sleging ban'and scratched the calwalk. No personnel
	Change of tank service T-3074. The service change included converting T-3074 from TKN to FCC feed inport lank.	RLP uses HTEC 577 (SKU 266141990) in almost every blend for fast moving fittished ponducts. During a heavy promotial time blending and terminalling raised concerns of potential admittive shortage that could've resulted in production down time, customer cuts, etc.	Key lost to LOTO box. Sometime between the start of the D&R Flare project the key was lost. Unknown time of lost key to box	The air was SID to the bioreactor controts to allow a depth survey to be conducted to determine the studge depth. Flow to the Bey continued for the 4 hours white the air was off. This is allowable under the NPDES permit provided advance notice is given to the RYVGCB. Notification to HES by Operations was not given prior to this event resulting in the RYVGCB not being notified in		P-124 was removed from SiSO and sent to the machine shop for ropairs, it was noted enter being received that the shipping tag was missing MSDS numbers, precautions required and that the "while" hazardous tag saction was still attended but tag, Furthermore there was a small amount of product teaking out of a flenge on the pump.	Overhead Clanky Crone was being positioned by Chavren employes when dusing his process the calwalk made contact with previously staged scaffoding. This bent the vertical staging bar and scratched the calwalk. No personnel injuries.
	NL-Business Process - Business Process	NL-Business Process	NL-Operational Process/Procedures Safety Systems	NL-Regulatory Compliance - Non Compliance - Water	NL-Business Process - Business Interruption	NL-Regulatory Compliance Non Compliance Complete	Equipment/Property
(1) PM procedures were not adequate to facilitate an effective PM to identify issues prior to causing damage to the frame,		(1) What? Polential production downlime due to shortege of HITEC577 Why? Increased production due to promotional domand resulted in heavy use of additive and planned through APO to rigger purchasing by plant purchaser why? Plant purchaser leavaraged, APO PURCHO3 to order this additive to support plant production schedule based on supplier lead times although reflects were not artiving as planned Why? The verdor lead time was showing as planned Why? The verdor lead time was showing 25 days see. So days. This lead time changed in 2011 from 26 days to 90 days. This lead time changed in 2011 from 26 days to 90 days but was not changed to CC5.		(1) Operations did not inform HES of the intent to stop agration in the Bioreactor prior to the stoppage.	(1) No strategy to balance H2 line reliability (4-6MMSCF to keep dry) against minimizing flow (fill out south yard H2 consumers) during a SID, when HEL H2 was not available.	(1) incident bescription: Pump was deliviored to machine stop with incomplete shipping lag per RI-304 FIVE WHY'S 1. Why did "habove" happen? Verifization RTD transported pump with shipping lag incomplete and hazardous "white section still on lag. 2. Why did "1 happen? Mechanics place pump on shipping platform with tag incomplete and hazardous "white section still on lag. 3. Why did "2" happen? Operations placed shipping lag on pump with missing information and hazardous white section still on lag. 4. Why did "3" happen? Operations didn't recognize lag was missing information and "white" hazardous lag section needed to be removed 5. Why did "4" happen? Didn't lothow RI-304 ha	positioned is re-by townsh country this process the canwark made consider with previously staged scarbforting. This ben't the vertical staging bar and scratished the calwaik. Why did "above" happen? Contract Company, Staging Est sate up scarffolding alloung the travel path of the SISO Overhead Gantly Cortan without hearging Caulton Riegs on the scarffolding and or vibraming Tag on the control stating the condition change. Why did "T happen? Secause even through an acceptable practice asticts and is lechnically right, I treads to be improved (improve clerity, cover additional scanariotisteps, as led to ensure the appropriate work force is notified of the condition change i.e. the JHA needs a step added to ensure hazards are liagged on appropriate equipment. (2) SISO Bootier Deck Overhead Scanity Crans was being positioned at Ke10 whon during this process the calwalk made confact with previously staged scaffolding. This bent the vortical staging but and scratished the celwalk. Why did "above" happen? Company EE did not recognize been recede along the traye present from scaffolding that had been recede along the traye present from scaffolding that had been recede along the traye present from scaffolding that had been recede along the traye present from scaffolding that had been receded along the size of the camera the scanaria to the susset that I peaks to me needed to writer cammit to the use their I peaks to use the ended to writer cammit to he use their I peaks to use the deck to what a camera decked to writer cammit to he use their I peaks to be the ended to writer cammit to he use their leaded to better ended to writer cammit to he use their leaded to better ended to writer cammit to he use their leaded to better ended to writer cammit to the use their leaded to better ended to writer cammit to the use their leaded to better ended to writer cammit to the use their leaded to better ended to writer cammit to the use their leaded to better ended to the camera the second to be the ended to the camera the second t

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37807	37806	37802	37758
Rechmond	Richmond, CA - Refinery	Richmond, CA •	CA - 37758 Refinery
5/17/2012 7/40:20	5/7/2012 12:00:00 AM	5/16/2012 4:45:00 PM	12:00:00 PM
Closed	Man agemen	Closed	Closed
Loss	New Loss	Loss	Loss
Operator suffered minor cut to finger, from glass sample boilts with chipped neck.	Transmission of annual properly tax data to County tacked information protection	Coding water piping damaged while in the process of moving the K-910 motor station stationary of the process of moving the K-910 motor station stations.	K-910 S/D due to crecks in the base
Employes cut his finger, while removing a cork from the neck of a 402 size glass sampto bottle. Afterwards, emiloyee notleed that the bottle was chipped at the neck, and suffered a minor cut even though he was wearing nittle exam	Annually we file a number of reports in spreadance, PDF and occument format with line Contra Costal County Assessors office to support the current year requests for information. Some of these items include company confidential information (we are required to provide so no issue their). These documents were sent as email attechments to the correct contact in the Assessors office. Information protection protocal was not followed.	Syr motor PM work was in progress for K-910 motor. During the process there were some insulators that appeared to be bose. A decision was made to move the motor statio hade for the inspection. A contract company was requested to disconnect the cooling water ping under the compressor deck. The disconnected princip was then supported by the contract company to prevent unnescensing ping was then supported by the contract company to prevent unnescensing pine statio. This positioned the pining farings back logatifier. The Major Machinery Cray dot not recognize the pining had been supported after Major Machinery Cray dot not recognize the pining had been supported after the decompact of moving the station move. During the process of moving the statior with the portion power the cooking water piping was landinged.	K-910 S/D due to cracks in K-910 (H2 booster compressor) SD due to cracks in the base, causing H2 the base
NL-injuy/ithness .	NL-Security - Information Protection Loss - Other	Equipment/Property	Equipment/Property Dernage
(1) Brille with chipped nack was distributed through the lab. (2) 'FIVE WHY'' One Page Report Indicant Number 27807' Business Unit Quality Control Div Location Bidg35 Facility Name Richmond Refrisiny incident less 5/17/2012 Type of Process Lab Tashing Type of Equipment: Sampling Bettle Fam Merribers. Actain Williams Jr., James Fox Incident Description: What (CCL Lab Operation surfered mitnor cut to Riggir from a glass sample bottle with a chipped nack, Where (Iccation or where in the process): Accident occurred al OCD in GC Lab RM 1125. When Morning of 5/17/2012 at 7-40 em. How Employee cut his finger, while removing a cork from the nack of a AC2 size glass sample bottle Proteins Statement (What is the key lasse that needs to be addressed?); How to increase severeness of the risks involved with the handing glassware at QCD, FVE WHY'S 1, Why did "1" happen? Several employees who handted the builte didn't notice the chipped had "3 happen? Sometimes cample tottle ge can obstaure share view of nock of 402 bottle. 5. Why did "4" happen? America- view of nock of 402 bottle. 5. Why did "4" happen? Several plassware is a routine activity that employees have become overly confident of not getting injured ROOT CAUSE: What was the Root Cause of your incidence the with chipped had weed to be distributed that the lab.	(1) Just familiar with the technology available to secure date with external parties., (2) process not in place to apply new standards to current processes - information protection standards where not applied to procedures - see additional roof cause - procedures did not exist, (3) procedures for the process do not exist.	(1) Cooling water ploing damaged while in the process of moving the MK-10 motor statio task with 2 ports-powers. Why did the above happen? 1. After the motor successful cooker plying langus verte separated the spool / piping was "lock supported to prevent hippe strain" and this was not recognized by the compressor crew prior to the move. Why did above happen? I hadequate communication during pre job mealing about how to perform the work. The crew was focused on the 250 cleanance between the stature and notor and did not account for needing semeone below the deck to mention the movel Rout cruss were as alca to communication of potential equiptment damage during the move which should have been discussed during the presenting.	(2) Age related deterioration of the grout cap resulted in apparation of the sole plates from it
	Operator suffered minor Cinger, from glass Ginger, while removing a cork from the neck of a 4OZ size cut to finger, from glass Ginger, from glass Ginger, while removing a cork from the neck of a 4OZ size cut to finger, from glass Ginger, while removing a cork from the neck of a 4OZ size cut to finger, from glass Ginger, from glass Ginger, while removing a cork from the neck of a 4OZ size cut to finger, from glass Ginger, from glass Ginger, from glass Ginger, while removing a cork from the neck of a 4OZ size cut to finger, from glass Ginger, from glass Ginger	Richmond, 5/17/2012 CA- Richmo	Rechmond, 5/19/2012 Costed Loss profess of motion (Loss profess of profess of polytic plan process there was not profess for harbit inspection. A correct discussory per study and the composer of delt. The class of motion (Loss profess of motion) bed for harbit inspection. A correct discussory per study and motion polytic the pulping of the process of motion (Loss profess) and motion polytic plans the polytic plans the polytic plans the process of motion (Loss profess) and motion polytic the pulping and been supported after the major statement of reports in spreadheat. PDF, and document (Jazze request or information because of his politic plans and polytic plans the polytic plans and profess of motion (Loss profess).  Annually we file a number of reports in spreadheat. PDF, and document (Jazze request for information (see an required to profes or on its she intellige).  Annually we file a number of reports in spreadheat. PDF, and document (Jazze request for information (see an required to profess or on its she intellige).  Annually we file a number of reports in spreadheat. PDF, and document (Jazze request for information (see are required to profess or on its she intellige).  Annually we file a number of reports in spreadheat. PDF, and document (Jazze request for information (see are required to profess or on its she intellige).  Annually we file a number of reports in spreadheat. PDF, and document (Jazze request for information (see are required to profess or on its she intellige).  Annually we file a number of reports in spreadheat. PDF, and document (Jazze request for information (see are required to profess or on its she intellige).  Annually we file a number of reports in spreadheat. PDF, and document (Jazze request for information (see are required to profess or on its she intellige).  Annually we file a number of reports in spreadheat. PDF, and document (Jazze request for information for information for information for information for infored in profess or information for information for information for

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	37932	37843	37839	37836	37835	37833	37831	3783D	37828	37810	37807
Richmond,	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Rtchmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	37807 Refinery
Richmond, 5/18/2012 CA - 6:00:00	5/18/2012 6:00:00	5/17/2012 2:10:00 PM	6/14/2012 12:00:00 AM	5/14/2012 7:00:00	5/12/2012 2:00:00 AM	5/11/2012 1:00:00 PM	5/10/2012 11:00:00 AM	5/10/2012 12:30:00 PM	5/7/2012 5:30:00 AM	5/18/2012 12:00:00 AM	AM
	Closed	Closed	Closed	Closed	Closed	Ciosed	Closed	Closed	Ciosed	investigation In Progress	Closed
N N N N N N N N N N N N N N N N N N N	Loss	28 88 88 88 88 88 88 88 88 88 88 88 88 8	10 gg	Logg	Near	Near Coss	N ear	Nosr Loss	Near	Coss Coss	區
Near working without a quilified	working without a quiffed HO	Non-Work retailed health	demage to bailer insulation/refractory, added cost to boiler SD	Green Card. Low hanging board on staging. Location: TK-992 (TRA)	Green Card. Need to implement a plan to supedite cleanups. Location: RLOP	Green Card, A lot of cracks/sink holes, Location: RLOP	Green Card, Solled coversils and PPE. Location: Cafeteria	Green Card. Naile and screws on ground. Lecation: Bahind CTR/Boiler Shop	Green Card. Poor visibility.	Loss of RLOP/GISO DMC	Loss neck.
Last Night 18 May 2012, an operator was forced to work as an HO when he was not qualified for the position. There was a force for vezation for 2 months and the dates were not covered. They were covered when an HO came back off of leave and then was forced oil the next few nights. He ended up calling in sick for the forces, leaving the crew short. We sent an operator home to come back that right to crows the board job that is needed. Making one operator book home after working 9 hr. off for 8 thon work another 9 hours. Because of this, it forced the board operator to work 16 hours. This same incident occured again	Leaf Night 18 May 2012, an operator was forced to work as an HO when his was not qualified for the position. There was a force for vacation for 2 months and the date were not covered. They were covered when an HO came back off of leave and then was forced in the next two rights. He ended up calling in sick for the forces, teaving the crow short. We sent an operation home to come back that right to cover the board job that is needed. Meking one operator go home effet working 9 int, off for 8 then work another 9 hours. Because of this, it forced he board operator to work 10 hours, This same incident occurred again the following right shift.	EE was transported off site by ambulance for a non-work related health issue. While at the child for an evaluation, the action made the determination that the EE needed to be transported by ambulance to off sight medical facility.	On 6/14/12 age discovered #3 Bailer damage to the beilbr ekin, insulation and brickwork on the fear mud-dum area. Insulation & andkwork contained which call as age and which call as grade involt expecting many steam tubes affecting draft and stack O2 levels. We shutdown the boller on \$1/5 to minimize further damage and cleanup the possible estessos pieces insulation to grade.		Green Card. There was a spill on surface that reprired immodiste attention. Went to get circleteen but leark was empty. Instead of heaving to call and wail for new tank to be seaby, could we implement some sort or plan to expecitia cleanups and sefery? Maybe here a tenk on both sides or ends. Especially in RLOP which is known for slapsey dhemical spills. Location: RLOP RLOP which is known for slapsey dhemical spills. Location: RLOP	Green Card. There are a lct of cracks and shirk holes throughout RLOP Marking paint is good for inpiging hazards but not lor sink holes. I feel that uting thirdbowns when foot traffic is high we should get bags of cul-back (remp asphall) to fill holes. This will be a good remedy for injuries and temp asphall comes a matell 15th bags which would make an efficient quick fix. Location: RLOP	Green Card, Nurretrous employees/contractors in cafaloria with scillad coveralls and PPE. Personnel sit at tables contaminating trables and chairs with unknown chemicals. Others sit in thase chairs transfering unknown chemicals pnic their personal clothes. Location: Cafaloria	Green Card, Halls and acrews an ground, Trailors, service bucks and forkfits petring punctured lires constantly, Location; Behind CTN/Boller Shop	Green Card. As lumed into Gate 91, there was a car in front of me that was almost in a treat-on accident with an excending car exting Gate 81. I have mentioned this before. Not only is the visibility poor due to detrons but the while 6 yealow fines on coad are barely visible. You can't full your in the wrong lana until its almost too late. Wa need to either put more tighling on road or put new petal down. I feel it's only a matter of time before there is an accident. Localism Gate 31.	ON 5/18 9am server was found to be not responding. Logging into the server was KVM showed that the server was kung up on intellizing RAID controller. Server was boarded up and found to have self-treboeded. It was found that one of the four primary hard drives failed and the server was using the global hot spare. The rebook was due to a hardware fault duting hot spare rebuild. Some of the firmware was found to be out of date as wall. Sonver was reboulded signing the troubeshooted and controllers started up on 6/17.	gioves.
NL-Business Process	NL-Regulatory Compliance Non	NL-injury/iliness - Employee injury	Equipment/Property Damage	NL-Injury/illness - Contractor injury	NL-Lessons Learned	NL-injury/Illnass - Contractor Injury	Nt-Lessons teamed	NL. Equipment/Property Damage - Equipment Damage	NL-Lessons (earned	NL-Business Process - Business Interruption	injury/litness
			(1) The boilers are 75 years old and deleriation of the exterior steel has corroded that and lest support for the harvallon.							(1) Suffered 2 cinvis logical failure. This caused the server to lebook. After rebooking the server hung up and needed to be hard roset. VHY? Needed to rebook server to investigate. Faulty drive was rebuilt after investigation. VHY? Firmware was also found to be out of date by one version from investigation. Firmware was left at current revision. Out of date firmware is not believed to have contributed to the failure. WHY? Server is 64 year old. Onvest and hardware are just MTRE. WHY? Funding unaveilable to replace APC servers. WHY? willing for global project to replace APC servers. WHY? willing for global project to replace APC.	neck was allowed to be distributed thru the lab.

(1) 1. Why did K-930 1st stage cylinder get hot? A 1st stage				_	_	_	
(1) The insulators work were approximately 10 years old Age related degression (Casual Factor 1), (2) How it bost to the ESP insulator housing for 40 hours (Casual Factor 3), (3) No corrective actions were lacen to ensure 0 EM evaluation from 2006 SD were noted and acted upon to prevent future failures of the insulators, (Casual Factor 2), (4) Position of the register of the insulators, (Casual Factor 2), (4) Position of the register is unknown in the vessel (Assumption Casual Factor 4) and Existing procedure to remove register is each cannot be focusely field to the root cause of this failure, it is only considered in this investigation as an area for improvement in crear to avoid future failures of the ESP.	Business Process	V-1440 (Acid Wash Drum) Electrostatic Precipitator want to ground (failed) on March 9, 2012, Unit was shut down to open, Inspect and repair the ESP on April 12, 2012 with feed in on April 19, 2012	RIC/Cracking/Alky/V-1440	Clased	4/17/2012 12:00:00	Richmond CA • Refinery	38106
	NL-Injury/สิทิกธรร - Contractor Injury	Green Card. While carrying material for my job. I noticed that multiple boards on the walkway are rotten. Upon further review, the supports underneath the walkway are rotting as well. Location: #1 Pump Station, 10' North of MP-101	Green Card. Multiple board's on walkway are miten, Lecalion; #1 Pump Loss Station, 10' N of MP-101	Closed La	5/17/2012 3:30:00 PM	Richmond CA - Refinery	38102
(14) FCC operations celled the Ulitius DHO reporting loss of power to MCC-9, located on Transformer Bank 148. The DHO found the main feeder for MCC-9 in the open position, found thillies breaker 148-1 in the open position and faund the breaker tark Ph-1 13C. In the open position were of the three open breakers had any "trp" indication on their protective device. The MCC-9 breaker's fiby unit battery was dead so it could not show a titp indication, the battery was represented the protective device. The MCC-9 breaker's fiby unit battery maintains the tip indication once the drout breaker opens. Utilities STL contacted Utilities CA for assistance. The maintenance on-pat supenvisor celled two electricates the high with the effort of the protection of power to switchgear. All testing stowed no indication of any fault on the system. Utilities began restoring of all indication on any fault on the system. Utilities began restoring power was restored. Operations began returning assential acquirement to service. More tasts were partitioned on MF-113C on dayshift. The molest lessed good and was started without incident. No root cause could be identified. There has been no loss of equipment since the system was returned to semical service. The sip indication battery was finished as the equipment is the contrained of MCC-9. The dead rusted to service. The sip indication battery was finished as the equipment on MCC-9 or fleeder truster.	Operational ProcessProcedures	At 2015 the FCC unit experienced an electrical problem on breaker 148. The rost of equipment associated with the breaker required a roduction in teed rate until the plant could be stabilized and the issue resolved.	Loss of FGC electrical breaker #149 which breakler this loss of regulad in the loss of critical a quipment.	Cossed	5/21/2012 10/15/2012 PM	Richmond CA	39040
(1) Past precitor of using a non-standard pipe sieeve (used an old pipe as a sevel) was lest han adequate and resulted to excelerate corresson of buried pipelines, (2) Accilional Consideration. Modificality scheme that was implemented on the JPS facility was less than adequate. Vassets sill have clay materials and these were not empited / not value washed, (3) Reinforce the use of SVMA for any deviation on approved procedures.	Erwironmental	in preparation of the soneduled 14 gas line repairs for maint a section of the 14 gas line which was previously used for Jr-5 was solated at a book 12PM. This section of line has been a dead day since we shuktown the jet blending its could be more than 10 years ago. Part of the plan was to drah the 60 foot section of line, since we dentified the line would not be have sun relieve protection. However the low point bleader on the dead leg portion of the line was to the footh, the leak was observed coming under Michwey St.	3.5 BBLS OF JET MATERIAL SPILLED INTO MATERIAL SPILLED INTO SECONDARY SECONDARY CONTAINAGET WHILE PREPAINING THE 14 PREPAINING THE 14 PAGE FOR LINE REPAIRS	Closed	5/21/2012 3:02:00 PM	Richmond, CA- Refinery	38032
(1) Past practice of using a non-standard pipe sleeve (used an old pipe as a sleeve) was less than adequate and resulted to accelerated corresion of builds pipelines, (2) Acceliforation Consideration: Aboritboiling scheme that was implemented on the JPS facility was less than adequate. Versatis still have clay materials and tines were not empited / not water washed, (3) Reintorce the use of SWA for any deviation on approved procedures.	Loss of Containment	In preparation of the schaduled 14 ons line repairs for maint a section of the 14 gas line which was previously used for JP-5 was scholed at about 12PM. This section of line has been a dead day since we shuldown the jet blending to facilities more than 10 years ago. Part of the plan was to draft the 60 foot section of line, since we identified the line would not be have sun relieve protection. However the low point bleader on the dead tag portion of the line was plugged. All about 1500H, the feat was observed coming under Midway St.	3.5 BBLS OF JET MATERIAL SPILLED INTO MATERIAL SPILLED INTO SECONDARY SECONDARY CONTAINMENT WHILE PREPAIRING THE 14 PREPAIRS GAS FOR LINE REPAIRS	Closed	5/21/2012 3:00:00 PM	Richmond, CA - Refinery	38032
(1) Sub-Contractor park in front of the valve box which was located off Wastern Cr. He had noticed the box when he enrived but forgot about it when he was pulling away.	Equipment/Property Demogs	Sib-contractor ran over a valve box which was on the shoulder of Western Dr. As a result he walls of the valve box was broken causing a plastic nipple on a air valve to gradu.	Sub-Contractor ran over EBMUD velve box.	Closed	5/21/2012 9:50:00 AM	Richmond, CA - Refinary	38028
(1) Piping design promotes turbulence by allowing socket wolded flanges in a highly corrective by stare.	Equipment/Property Demege	Ph hole leak on 1 1/2" pipe up stram of LC-831 and downstream of E-831	Pin hole leak 8 plant NH3	Closed	5/21/2012 1:30:00 PM	Richmond, CA Reference	30022
(1) Driver thought he had enough room to make it through but could not see right side of fuck from driver seat to confirm	Transportation	While passing by a vac tuck on SP Hill Rd by T-982 pickup truck contacted guard rail on the passenger side of the fruck causing minor demage to the truck	Pickup truck contacted toss guard rail	Clased La	5/21/2012 10:30:00 AM	Richmend, CA - 38017 Referry	3801
	- Business Process	une following night shift.	Loss HO	Closed Lc	PM	37932 Retnery	3793

	38110	38107
Richmond,	Richmond, CA - Refinery	Richmend CA - Refinory
521/2012 12.00:00	5/21/2012 10:00:00 AN	5/22/2012 2:00:00 FM
Slewardship	Closed	Closed
	Loss	200
Natural gas release during commission of new flare	Dill into miss identified utility pipeline (identified on ISO drawing as Dead Sewer Line)	K-830 hat ist stage
During commission of natural gae system and the in-line filters for F395D a low point drain valve was left in the open position and was no identified when the system was filed walked. This allowed natural gas to vent through the low point	During the Capital project job to modify the RDC Pipeway, a miss identified construction drawing strowed a featy water time as a dead saver line. The line was painted orange for demo and cut lape was applied in proparation to verify pipetine condition. Contractor with operation standing by drilled into the line assuming that it was a sewer line as indicated on the 180 drawings. After drilling the line feats water canne out the drilled hale and was immediately plugged with a tapered plug.	Shortly after placing K-911C back in service after a filter change out, K-930 1st stage dischage tempeture jumped, exceeding 400F. This required K-930 to be shuddown.
	Operational Process/Procedures	Equipment/Fioperty
(1) f. Why was hydrocarbon venied to almosphere? A drain relive was left in the open position. The individing as subsystem was being put in serulca as part of the F-3330 promises the property of the F-3330 promises an experience of the F-3330 promises and the F-3330 promises an experience of the property of the proper	(1) (1) Drawing in execution package mis identified the fresh water line as a sewer line. , (2) 2) No positive isolation by Operations before releasing line , (3) (3) Change of conditions were not effectively communicated in several areas	cylinder discharge valve was damaged 2. Why was the discharge valve damaged? The discharge valve was a damaged because it was plugged up with lydrated fron chorder material? An experience it was plugged up with lydrated fron chorder material? An experience it was plugged up with lydrated fron chorder meterial? Indeequate training for chordes upstream in C-960 chlorder sembler; iten seede in piping systems and chlorder combine to form fron chorder in piping systems and chlorder combine to form fron chorder in piping systems and chlorder combine to form fron chorder in piping systems and chlorder combine to form fron chorder in piping systems and chlorder combine to form fron chorder in piping systems and chlorder combine to form fron chorder in piping of caustic level for experience in experience in combine to the production of the charge of caustic level in C-960. The resulted in a failure to remove chardes in the 12 steam. S. Mythy would an Operation not know that there was nested up to sampled and tested for chlorders in the 12 steam of C-960, and there is not coulties a single point. SA, (from 3) Why was the discharge water in the piping system is sufficient to break loose material that has accumulated on the pipon solas. SA. Why was there water present in the piping system is sufficient to break loose material that has accumulated on the piping solve in a captiment to bot valves with K-811 C. of of the service for fifter change 8A. Why did water remain in the system ollowing commissioning of K-911 C. For sample, a procedure would indicate valve orientation, below of water piping, a procedure would indicate valve orientation, below of water piping, a procedure would indicate valve orientation, below of water piping and piping of the size to commission K-911 C. For example, a procedure would indicate valve orientation, below of the piping to commission of the change and piping to the piping to commission of the size of the size to commission of the size to commission of the change in the piping to commission

https://impacterm.chevron.com/IMPACT/ANYWHERE/Reports/exports/scenario_159134_f8a5390b-1e90-4874-b012-4d17412a3a40.htm 8/9/2012

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38255	38206	38206	38186	36182	38164	38354	39111	38111
Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA Rafinery	Richmond, CA - Resnery	Richmond, CA - Refinery	Richmond, CA - Rofinery	Richmond, CA. 38111 Rafinery	38111 Refinery
5/23/2012 3:00:00 PM	5/21/2012 12:00:00 AM	5/21/2012 12:00:00 AM	5/23/2012 11:45:00 AM	6/22/2012 2:00:00 PM	5/17/2012 8:00:00 AM	5/17/2012 8:00:00 AM	5/2/1/2012 12/00-00	š
Fact Gathering	Closed	Closed	Closed	Clased	Closed	Closed	Sinverdship Review	Review
Loss	Near	Near Loss	Near	Near	Near Logs	Near	10 55	1035
gasket material not avallable on site when reeded for K-530 cylinder repairs	Radio Communication very unreliable	Radio Communication very unrelable	Seal Injection dasign	Green Card. Repeir handreil Localion: 214 Mein Exterior Remp	JPB injection PLC faut, Math everflow error	JP8 Injection PLC faut, Mails overflow error	Natural gas release during commission of now flare F3800	Loss F3930
IX-930 was SD on high temperature on #3 cylinder. A large amount of debrts was found in X-930 Ist elege cylinders. Compressor crew is working around the clock to dean up and replace valves on both #1 and #3 cylinders. During repairs it was found that we do not have head geakels in atork. This will delity the repair considerable and is costing the reference 2000-250M per day. The gastets are slorehouse stock fems and have a fow limit level at which they should have been reordered.	Communication system got busied up and calls wore dropped.	Communication system got busied up and calls were drepped.	Seal injection for control valves, using Flowssinve 400-D Hydraulic Handgun. Design Engineering and Maintenance should review if sealant packing method, using 400-D Sealant Gen, Is stille, Sealant gun can pressurize to 11000 pst. Are sealant port fillings rated to 11,000 pst.	Green Card. White using the isn handzall and descending the exterior ramp, an installer felt for all cards under his hand. The rall is proteed and needs to be a replaced. The wood on the entire tamp is spongy and both raits show signs of wood on. The ramp needs to be repaired before it is safe to use again. Location: 214 Main Exterior Ramp.	JP8 injection PLC experienced a fault and would not process. Fault indicators in the processor indicated a reath overflow error. Had the potential of delaying cargo load to vessel at the Longwherf.	JPB Injection PLC experienced a fault and would not process. Fault Indicators in the processer indicated a math overflow error. Had the potential of delaying cargo load to vessel at the Longwhart.	During commission of natural gas system and the In-line filters for F3050 a low point driat valve was left in the open position and was not identified when the system was find walked. This allowed natural gas to vent through the low point drain into the lote fare.	drain into the idle fare.
Equ pmanl/Property Damage	NL- Equipment/Property Demage - General Listility	NL-Business Process - Business Interruption	NL-Lessons Learned	NL hjuryllingss - Employae injury	NL-Quality - Additive Injection (Int)	NL-Business Process - Business Process	Environmentaj	Loss of Confairment
					(1) Did not discuss this with design contractor, FIVE WHY'S 1. Why did "bove "happen? Math overflow in PLC 2. Why did "i'1 happen? Some unidentified value in the PLC dropped out of calculation range, 3. Why did "2" happen? Possibility of division by 0 was not expected or anticipated 8. Why did ?" happen?		(1) 1. Why was hydrocation venied to elmosphere? A drain value was left in the open position. The natural gas sub system was being put in service as part of the F-350 tecoministic provided to the fare 3. The natural gas system was the drain value left in the popular position? The natural gas system was commissioned without vanifying that all valve line ups were correct to avoid unintended flow to the fare 3. Orthy was the system commissioned without vanifying that was and review to understand the system of not occur 4. Why did a thorough field walk not cocur prior to commissioning? The Operator was primarily focused on chaesing bleedore and variety to interprete outling this field walk and didn't understand the rew line system did not occur with the system of the system and walk in the system and the system and walk in the sub-system that not been completed? Term didn't understand fines to be required for subsystem of the system and walk in the system as the system and the system as the system as the system as walk in the system as the syste	associated with projects have been commits!

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	38262	38282	38274	39274
Richmond,	Richmond, CA - Refinery	Richmend, CA - Relinery	Richmond,	Richmond, Rofmond
5/24/2012	5/24/2012 11/20:00 AM	5/24/2012 11:20:00 AM	5/23/2012 1:30:00 PM	5/23/2012 1:30:00
	Closed	Closed	Clused	Cipaed
	Near Loss	Near	L Noar	L N
	Allergy relief of unknwn initation.	Altergy relief of unkown initation.	A concern was raised about the melhod being used to take a sleet rather cage.	A concern was raised book in the method being used to raise a steet reparcage.
Chevron employee in the Strategy and Long Range Planning group was stung	Contractor was prepping pipe for paint on the T 3076 Line. At Lunch time a co- worker noticed that the eye brow of subject employee was swollen. So they informed that supervisar and made the call to the Constiolen Rep and said that they wanted to go to Chevron clinic to be checked out.	Contractor was presping pipe for paint on the T 3076 Line. At Lunch time a co- worker noticed that the eye brow of subject employee was excilien. So they informed their supervisor and made in lead to the Constitucion Rep and said that they wanted to go to Chevron clinic to be checked out.		The crew was litting a 300 # rebar caps with a come-along when it became off centered which caused it to stowly roll to the right and rost against a guy wire. The top of the caps was about 3 leet off the ground. Tag lines were in place to help control the kit.
	NL-Lessons Learned	NL-injuryilliness - Contractor injury	NI-Operational Process/Procedures - Safely Systems	NI. Business Process
	and the second s		(1) "FIVE WHY" One Page Report Incident Number #39274 Business Unit Blanding & Shipping is ceation Office Hill Facility Name Incident dails 6221/2 Type of Process Type of Equipment Team Members: Ron Bikovich, Mike Matilin, Geg Goebel St. Incident Description: What The crew was string a 300 # reber cage with a some-stong when it became of contrared which caused it to stowy roll to the right and rest against a guy wire. The top of the cage was about 3 feet of the ground. Tag lines were in place to help control the lift. Where (scalin) or whore he he persons place to help control the lift. Where (scalin) or whore he he persons place to help control the lift. Where (scalin) or whore he he persons place to help control the lift. Where (scalin) or whore he section or whore he was figged it was of confer to the hole. Poblem Statement (What is the key issue that needs to be addressed?): Use of a tility role for rigging purposes. FIVE WHY S 1. Why did above happen? Vanification The rigging was off confer to the hole. 2 Why did "1" happen? This was for benefit to the hole. 2 Why did "1" happen? Who couldn't get equipment hear so the spet where the homeland Security equipment was to be installed 3. Why did "2" happen? Who couldn't get equipment hear is he spot where the homeland Security equipment was to be set the cage to prevent potential highly to personnel 4. Why did "5" happen? Who couldn't get equipment because he spot where the prevent potential highly to personnel 4. Why did "5" happen? Who expend to be as was surrounded by utility fines, guy wires and Scated on a leading pad at the side of Office Hill. 5. Why did "4" happen? Who were the couldn't get equipment because the spot where the prevent potential highly to each of the did "6" happen? Who couldn't be each because previously we were successful performing the task by rigging of a nearby the first of the Why did "4" happen? Who couldn't be each because previously we were happen? 8. Why did "5" happen? 8. Why did "5" happen? 8. Why did "5" happen? 8. Why did "	

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	38756	38754	38732	38700	38688	38682	38682	38080	38643	38636	38360	38329	38289	38289
Richmond,	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA • Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - 38329 Refinery	Richmond. CA - Refinery	38289 Refinery
Richmond,   5/15/2012	5/15/2012 6:45:00 AM	5/9/2012 3:00:00 PM	5/29/2012 12:00:00 AM	5/30/2012 4:08:00 PM	5/30/2012 1:45:00 AM	5/30/2012 12:30:00 PM	6/30/2012 12:30:00 PM	6/24/2012 12:00:00 PM	5/30/2012 12:00:00 AM	5/26/2012 8:07:00 AM	48/2012 9:00:00 AM	5/25/2012 10:00:00 AM	5/24/2012 1:00:00 PM	1:00:00 PM
<b>V</b>	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Chaed	Closed	Closed	Closed	Closed	Closed	Closed
	Near Loss	Near Loss	Near	Loss	Nea: Loss	Loss	Loss	Near	Coss	Near Loss	Loss	Near Loss	Loss	[0 <u>8</u>
Green Card - Smoke pit at 13pit was releasing an	Green Card - Sleam Leak	Green Card - Drain slicking up	T-991 premium gasoline tank off test for octane no communication given to planning.	Contract EE splashed difuted ciri-clean solution into his right eye.	Leaking clamp on 8" Office Hill kne (<1bb! to secondary containment)	EE was hit on the finger by a bolt that was being deened on a stationary wire wheel.	EE was hit on the finger by a boil that was being deaned on a stationary wite wheel.	Contract employee found without SSE sticker on hardhat.	Lost key to LOTO BOX	Unsuthorized key holder opened the locked cabinet containing the PMI analyzer guns.	A pilig was left winciplied in a pilicin bearing during last year's overhaul period medical severhal period and severhal period and period control of the period control of the presentated oil gallery on the low speed oxigut side of the part. This was the cause of the internal period pressure in the oil peakery. This a warrastly to gatery. This a warrastly to peakery. This a warrastly repair.	LOTO box for P-1166 was missing operations key.	Chevron EE stung by bee	Chayron EE slung by bee
	10 fact south of F-530 there is an overhead steam teak that needs to be fixed. Sol condensate is dripping onto the walkway underneath the teak. Will need scatted to reach and will need to remove insulation.	10 feet west of V-1052 there is a drain slicking up creating a tripping hazard.	T-991 pram um gassilna tenk off tast for octana not communicated to planning.	Contract EE working at Tag?9 as a hole waith were assisting a co-worker who was onling the tark. The hole watch grabbed a rag scaked in a dixed citical country of the face shided of the EE sating the tank. As he wipset the face shided if the EE sating the tank as he land in the end of the rag stung the distingt solution into the air landing behind the EE safety glasses into his light eye. The contract EE immediately furthed he eye with water from the portable safety showardays wash at the job site.	Operations discovered a leaking clamp on the 8" Office Hill line at #1 Pump Station. The leak was due to the line pressure increasing due to heat of line day. The leak was flowing to gwrided accordany contilement and is estimated to be leas than 1 barrel. This segment of line is not protected by PRD's.	EE was clearing a 12" x 1 14" bolt with a stationary wire wheat when the bolt spun out of the hands causing the bolt to strike the 3de of the left index ringer within the first key cliqles. The EE was not weaking gloves due to the nature of roleting aquipment. Nomex long steeves and safety glasses were being used.	EE was dearing a 12" x 1 14" bolt with a stationary wire wheel when the bolt pun out of the hande eausing the bolt to stike the side of the left index finger within the flets to plaint. The EE was not wearing gloves due to the nature of rolating equipment. Namex long sleeves and safety glasses were being used.	Employee found working without SSE alloker on hardhat	Last Key to LOTO box	An urauthorized key holder had opened the locked cabinet contining the PMI analyzer gue wither are regulated radiated the equipment by the Stelle of California. Department of Public Health, U.A. code of Regulations, Title 17, Section 80253, INITAL DESCRIPTION; SEE LINK ATTACHED IN INVESTIGATION FOR COMPUTE, IET O'OF REPORT.	A plug was lell uninstalled in a pinion bearing during last year's overheut performed oxistic expair shop. The plug is installed in a port connected to the presentated oil gallery on the low speed oxigual side of the gear. This was the cause of the thermal leakings and mability to hold pressure in the oil gallery. This are are arealy repair.	LOTO box for P-1185 was missing operations key.	Chevron employee in the Strategy and Long Range Planning group was stary on he left hand by a bee that was on a chair in an office on the 2nd floor of the Admin Building	
	NL-Environmental - Operational Leak	NL-injury/illness - Contractor Injury	NL-Qualily - Product Unavailable	injuryiliness	NL-Environmental - Operational Leak	injuryfilhoss	NL-injury/liness - Employee injury	NL-Locsons Learned	Business Fracess	NL-Regulatory Compliance - Non Compliance - Company Policy	Quakty	NL-Operational Process/Procedures - Sefety Systems	lnjucy/illness	NL-injuryiliness - Employee injury
			(1) The expectation of or instruction as to which find of Bland Report should be used has not been effectively communicated to operations. Operators do not have a clear (consistent across all four crews) understanding of which report was should be using., (2) Operator did not incroughly review the End of Bland Report(s) and/or communicate findings to HO.	(1) Solution splashod into the হিছ eye bocquee required PPE খৰঙ not designed to protect against kquid splash	(1) Lack of understanding regarding over pressure protection on lines without PRD's.	(1) EE lost grip white holding a bok.	(1) EE iosi grip while holding a bolt.		(1) Key not put in LOTO box	(1) No key control process in place for access to PMI cabinot. (2) The Niton PMI analyzer technicians dd not always advere to the policy to ensure the analyzers were returned to the policy to ensure the analyzers were returned to the cabinot immediately after use	(1) Lack of Luffin shop procedure for robuil bearings			

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	38832	38820	38793	38778	38/77	38775	38774	38773	38767	38764	39761	38760	38759	38758	38757
Richmond, 5/31/2012	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmend, CA - 38793 Refinary	Richmend, CA - Refinery	Richmond, CA - Retinary	Richmond, CA - Refinery	Richmend, CA - Refinery	Richmond, CA - Refinery	Richmond. CA - Refinory	Richmand, CA - Rainery	Richmond, CA - Refinery	Richmend, CA - Refinery	Richmend, CA - Refinery	Richmend, CA - Refinery	CA - Refinery
5/31/2012	5/39/2012 12:00:00 AM	5/15/2012 12:00:00 AM	\$25/2012 2:00.00 PM	5/15/2012 9:30:00 PM	5/16/2012 12:00:00 AM	5/21/2012 4:00:00 PM	5/16/2012 8:40:00 AM	5/30/2012 12:00:00 AM	6/30/2012 3:00:00 PM	5/14/2012 12:00:00 AM	5/16/2012 9:00:00 PM	5/19/2012 7:40:00 AM	5/29/2012 7:30:00 AM	-5/16/2012 7:30:00 AM	12:58:00 AM
	Closed	Closed	Closed	Closed	Сюзес	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
· · · · · · · · · · · · · · · · · · ·	Near	Near Loss	Neer Loss	Coss	Near Loss	Near Loss	Near Loss	Near Loss	Loss	Near	Loss Near	Near	Near Loss	Neer	Naar Loss
V-712 Pressure Controller	Late shipment of APS	IL-1822 Initial Pop <90% of Set Pressure	PD-25 failed to lift at 125% of sat for recertification.	Green Card00 dagrae invisible bump	Green Card-Steam Leaks	Green Card-Bad Permit	Green Card-Butene Smell	GREEN CARD Steam	Crew was culting a squared-hofe in bathroom walf to gain access to repair a urinel drain pipe. In doing the culting of plywood wall, empleyee cut water line.	GREEN CARD-OBy Surfaces in RLOP	GREEN CARD-Steam	GREEN CARD-Entry Permit with wrong date	Green Card - Rebar skicking out on walkway between Boiler #3 & #4	GREEN CARD-Steam	Intolerable amount of smoke
At approximately 11:30 PM on 5/31 the OWS 4 (TKC Board Operator) redeved a low output aliam on 73Pc710 pressure controller on V/12. The unusual culput also from the first owner the area operator. The OWS-4 requested the Area operator is write years pressure locally. The area operator reported back that the even pressure of that the PSV(X7141) was alfain g (the PSV is set to 450lbs). Moves were immediaty made on the board to open	No ADS injection to the FCC overhead system on account that the supply wasn't represished.	IL-1822 (Inermal protection for the 18 plant recovered oil line to the plant boundary) was removed and serviced for API compliance. During the initial poptest the valve relatived at 85 paig (-80% of CSP). The cold set pressure for this valve is 345 paig.	The steam drum safely for #3 baller at the #1 Fower Plant was removed for resertification by Code VR shop, Swan Associates FD-25 was prelasted at the shop and falled to lift at 123% of 892 psig set pressure. Chevron was notified for instructions, cleassambly was stopped until the shop was visited by representables from Engineering, inspection and Quality Management to winess disassembly.	Grean Card - In the parking lot on the northwest corner of the control room has a steep 60 degree bump that is not visible unfil you bit it.	Green CardWrite walking throughout 11, 12, 43 plants, I noticed a lot of valves & connections would shoot out steam without any warning. I retrieved caution tape and blocked surrounding area.	Green Card-Pointed out to the operator that the non flammable permit needed to be updated before the company started buffing.	Green Card-Strong burane small corring from undameath Reactor #3580	Green Card-White driving by the alley southeast of the D&R control room to saw that there was a major steam leak.	Employee was cutting a hole in the wall of main bathroom to gain access for another contractor to repair drain line, while cutting the wall with a savzall, employee cut a welf line that was next to drain pipe. Where the was not shull office where the was not shull office access the same than the bathroom and into the hallway.	GREEN CARD-I have realized that RLOP is notorious for ply surfaces, more than other units. I also realized that we carroot go and put grip tape throughout the entire stefent, but how booth if RLOP Plants (11, 12, &13) could have grip tape on the steles and ladder rungs?	GREEN GARD-White walking through the plas stay in between 11 & 13 plants stipped but eavgh my balance. I could not see the oil substance due to a major steam teak in the area.	gREEN CARD—The enly permit for K-910 was wrong. The operator signed the date as 4/19 instead of 5/19	A place of rebar keeps on sticking up in the walkway between boller #4 & #3. We step on it to put it back down.	GREEN CARD-Bad ovorhoad steam loak next to F-914 leaking down onto walkway. Leaking condensale is very hot!	Three contract employees recognized that lihe smoke pit was misssing an infolorable amount of smoke.
	NL-Qualty - Lato Shipment	NL-Operational Process/Procedures - Safety Systems	NL-Operational Process/Procedures Pressure Retief Devices (PRD)	NL-injury/iliness - Contractor Injury	NL-Injury/ilinese - Contractor injury	NL-Quality - Paperwork Incorrect/Not Sent	NL-Regulatory Compliance - Non Compliance - Air	NL-Environmental - Operational Leak	Equipment/Property Damage	NL-injury/illnoss - Contractor injury	NL-Injury/Itness - Contractor injury	NL-Quality - Faperwork Incorrect/Not Seril	NL-injury/liness Contractor injury	NL-Environmental - Operational Leak	NL-Fire/Explosion
(1) Why Did PSV IX7141 on V-712 Lift? The PSV litted due to and overpressure condition on V-712. Why was thore an overpressure condition on V-712? The overpressure condition on V-712? The overpressure condition on V-712 was due to the output on 73PC-710 cleans get. Why was the output on 73PC-710 cleans get. The output on 73PC-710 was closing off because the pressure indicator was showing the pressure was decreasing in V-712. Why was the pressure indication decreasing in V-712. The sauric indication was decreasing in V-712 due to Phogging in the pressure.	(1) The head operator submitted the MR for ADS to his STL after 4:30 ster the STL had left for his week off. The HO entered he ordered APS on the white board in the control room but did not add MR#. The noder was not approved and was still in draft. The other overs add not follow up thinging the order was in route. All HO were trained on the corrective action, All MR# will be confirmed as received by the STL. And the MR# environd in the HO turnover.	<ul> <li>(1) Normal wear from valve relieving due to blacked in status and sun over pressuring the tine.</li> </ul>	- (1) Normal wear and lear						(1) Employee assumed water was shut off, Water line was not identified.						

	NL-injury/lliness -		EE reported having a sore back when he came to	Near	************	6/5/2012 6:00:00	Richmond, CA ·		
(1) What Happead? Molor shaft coupling hub may not have been reassembled to the compressor crank shaft coupling hub in the same location as if was found 1. Why did shove happen? Crew did not correctly match mark the coupling and pickups prior to disassemelty. 2. Why did shove happen? Crew disast to communicate who would complete the match marking of these pickups. 3. Why did above happen? Poor communication during bob preparation. If needs improvement (pre-job chairing, work package/parmit, job walk-thru, etc.) Root Cause is lact of communication within the crew to ansure the pick ups were match marks no one was assisgned to do the task and each assumed the other had been care of it.	Ajiano	There are two separate and independent TDC pickups on the MK-910 motor shall, One for the Hydrocon system and one for the Windrock morition; system. Windrock weekly report indicating both mag pickups are no larger looking at TDC. This points to the possibility that the motor shall coupling but may not have been researched to the compressor crenk shall coupling bub in the same location as it was found.	hactor shall coupling hub may not have been reassembled to the comporesor crank shaft coupling hub in the same location as it was found.	Loss	Closed	8/30/2012 2.00:00 PM	Richmond, CA . 39063 Refinery	39063	<u></u>
(1) No communication from operations to the analyzer group of planned firsh date, so that analyzers could be turned on: , (2) Vulnerability in ally HES sheds where data is not crosschecked was not recognized.	NL-Regulatory Compliance - Non Compliance - Air	On May 28, fuel gas was introduced and fires were it in RLOP furnace F-1750 (stack F-1251) but NOv. CO., and O2 analyzers were not placed in service. F-1251 therefore missed the daily autho-calibration on May 28 brough May 31. The missed celterations were not discovered until daily checks on June 1. Missed celterations are by definition inoprestive monitors, and per the Tide V permit, must be reported within 24 hr or the next business day of their occurrence.	inoperative monitor on F- 1750 formissed calibration not reported within 24 hr or the next business day.	No er	Chand	5/29/2012 12:00:00	Richmond, CA - Refinery	39033	
	NL-Quality - Additive Injection (Int)	A shipment of resh MEA amived in a truck on 5/22/12 in the morning. Per procedure, the area operator driew a sample and ren an MEA strength test in the field leb. The MEA shipment is supposed to be 99% MEA but the lest result came back at around 70%, despite running the test twice. It appeared that the shipment did not meet the specification for what was purchassed.	incorrect measurement of MEA strength from incoming truck shipment	Neor Loss	Fact Gathering	5/22/2012 8:00:00 AM	Richmond CA - Relinery	39032	
	NL-injury/iliness - Contractor injury	Green Card-Lots of oity surfaces near pumps P601 and P601A creating a slipping heased.	Green Card~Olly surfaces near P601 and P601A	Near Loss	Closed	5/30/2012 8:00:00 AM	Richmend, CA - Refinery	38985	
	NL- Equipment/Property Damage - General Liability	Green Card-There are people pulling their respirators in the bins at CTR with the carddges sili on them. Carddges should be removed at the decon area or should be put into an orange/black hezardous waste bin	Green Card-Respirators found with Calridges Attached	Near Loss	Closed	5/22/2012 10:30:00 AM	Richmond, CA - Refinery	30902	
(1) Lack of personal	NIBusiness Process - Business Process	On 0/2N - Two crew members had called in sick for the same operating plant. I Head Operator and 1 Operator. The first call for sick was done in a reasonable amount of time to selder for phone calls to be made to the available courtesy for coverage. No volunteer was a variable. The R-norm SiB was given a courtesy call and used to cover. The 2nd call came in @ 1600hs, no other volunteers or returned calls were received. The SVB was a qualified H.O. and replaced the first call in. The individual remained in the plant to meet minimum islands for the plant. The STB was considered in the plant of the call that the head operator.	Shared job responsibilides due to chartage of marpower	Noer Loss	investigation in Progress	8222012 6:00:00 PM	Richmend, CA - Refinery	38902	
(1) K300A shut down Why - Low lute a til shuldown altim Why - Truthria blue all pump citipped off fare (1) Why - possibly due to P360 APS chack caused bance in steam system (2) Why - APS motor pump did not atan. WR 358061 written to inspectivepail.	NL-Operational Process/Procedures - Plant Run Out/Slow Down	K300A shut dawn dus to low lube oil pressure.	K300A shut down due to low lube oil pressure.	Near	Closed	6/3/2012 9:57:00 AM	Richmond, CA - Refinery	38938	
(1) The root cause of the fellure is the mechanical feliure of the seal oil trap as a resul of a lack of preventative maintenance and poor trap design. With regular servicing and ceaning this failure may have been avoided, but due to the design thoro is an inherent list of feiture. (Design is similar to that of a steem (rep and unlike the other tube oil/seal oil traps in the minery). (2) Contributing Feder: Luceteand di was found to be 150-220 opposed to GST-46. This could have been a contributing steeler is the seal teal(g) that were pepired in conjunction with this failure. If the seal had not failed there may not have been anough entrained VCC's in the seal had not failed there may not have been anough entrained VCC's in the seal had not failed there may not have been anough entrained VCC's in the search of the search a limit.	EquipmenUPreporty Damage	While investigating natural gas orders Operations Identified natural gas escaping from K-300 gear box and sube oil tenk wents. VOC group was notified and determined the concentration to be in excess of the reg 8-18 environmental limits. IMI and eperations determined the cutter of the leak to be imbrard seal failure leaking to the contemination of the lube oil system. Reg 8-18 requires the that the betk be minimized in 24 hrs and okinhated within 7 days.	K-300 Seal failure / VOC	Loss	Closed	46/2012 2:00:00 PM	Richmord, GA - Refinary	38905	
(1) why Was HNF bottoms product actied off test? Hnf softoms product was routed cff test doe to C-1550 column upset. Why was there a C-1550 column puset? There was there a C-1550 column puset in the set of the	Operational Process/Procedures	While setting P-1655A up for operation after the EBV was repaired, operations slowly began to open the suction valve to introduce product back into the pump. At this time P-1655 began to cavilate and caused tevel to build in C-1650 causing a column upset. Bottoms was routed off test for 1 hour to recover column stability	HAF Balloms rouled off test for 1 hr	Loss	Closed	5/31/2012 6:15:00 PM	Richmond, CA - 38950 Refinery	38850	
indicator leads. Why did the pressure indicator leads plug? Process condition may have toad to plugging in the leads	Operational Process/Procedures	the PC and reduce the pressure on the vessel. Several minutes later the PSV reset.	faited causing PSV to IIN. No flaring occured	Loss	Closed	11:30:00 PM	CA - 36547 Refinery	36647	

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	39161	30159	39158	39151	39151	39144	39140	39136	39095	39067
	Richmend, CA . 39161 Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond CA - Refinery	Richmend, CA.	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	39067 Ratinary
	5/6/2012 3/00:00 PM	8/6/2012 8:15:00 AM	6/6/2012 11:00.00 AM	6/2/2012 12:00:00 AM	6/2/2012 12:00:00	0/5/2012 12:00:00 AM	5/6/2012 7:39:00 AM	6/5/2012 12:00:00 AM		ž
	Closed	Closed	Clased	investigation	invastigai cm	Closed	Closed	Closed	Closed	Closed
	E95	Near Loss	Near	Loss	Loss	Near Loss	Non-	Zear Coss	Near	108
	About 145 ib of Ratural was released to the atmosphere when the Natural gas PRD lifted	Personal H2S monistor activated	Chavron employee made unsafe left turn avurud fordift on Channal St	HNC was at reduced feed rates due to nitrogen results being above the max fault of 1.5 ppm. (samples sent to QCD every day is 1.2 AM). A check sample was sent to ETC for HNC 6 S/C Way 220 and had a much lower fesult 0.5 ppm.	HNC was all reduced feed rates due to nitrogen results theirs, above the max limit of the pen (samples sent to QCD every day at 12 AM). A check sample was sent to ETO for HNO 6 5/C Waxy 270 and had a much toward result 0.5 ppm.	Oidn't approve rounds, sorry I'm human	White calibrating 4 Cat feed meter, feed was temporarily chopped.	Control Radio feilure	Hgh Nickel at the Bioreactor Gullet	Loss work
Oue to the type of product that Vesset 65 Roses had on its previous voyage,	Due to the type of product that Vessel 86 Roses had on its previous veyege, the vapor recovery needs to be in placed while loading fuel. After loading fuel of, and after shulling down the vapor recovery in both #2. The natural gas pressure went up and caused the PRD to relieve for 9 mins. Fuller investigation showed that the artural gas pressure control was switched from auto to manual control had builted.		Contractor driving defidit north on Channel St was stopped and us no hand signal to indicate illenible no but mellon to fe conclation Stayed while weiting for opposing traffic to clear. Chewron pickup (driven by a Chevron employee identifiable by Nie covereits) came up behind the locklift and passed on the left, driving on the word guide of the road, before himself making a left furn on to froundsion Street. A cominactor driven vehicle coming south on Channel St, was forced to come to a stop to avoid a collision. Chevron pickup sid not stop.	HNC feed was below plan due to high 6 SiC Waay 220 and bottoms Waay 850 product nitrogen results link wate above the high link of 1,5 ppm since 64/12. The LNF was starting the first 220R run on the new catalyst load and due to concerns of high nitrogen feed descitivating the new catalyst, a check sample was putied on the HNC 65 CV Waay 220 steam and son to ETC. The CCD result at 64 12 AM was 2.8 ppm, a check sample to ETC at 64 12 PM was a CAT ppm per ETC (the oversiel CAT remelbed within 1 day F), and the following CCD sample on 66 12 AM was 1.6 ppm, The following day on 66, the CCD waay 220 or was 0.0 Rivers of the CTC of the control of the Waay 220 nitrogen results moved in opposite of tercitors distributed that NC reactor CAT slightly increased. The Waay 220 nitrogen is control of the Waay 220 nitrogen in 1,3 ppm). Due to the high nitrogen results for multiple days, the HNC rearesed from 1.5 ppm) while the Waay 650 Niz was 2.3 ppm (for was been higher but HNC Waay 220 nick was 0.8 ppm high returned to 1,3 ppm). Use to be 1,4 ppm high nitrogen results for multiple days, where been higher but HNC Waay 220 not was 0.8 ppm first been higher but HNC Waay 220 not was 0.8 ppm first of chromated from 1.5 ppm). Waay 220 not was 0.8 ppm first been higher but HNC Waay 220 not was 0.8 ppm first been higher but HNC Waay 220 not was 0.8 ppm first been higher but HNC Waay 220 not was 0.8 ppm first been higher but HNC Waay 220 not was 0.8 ppm first been higher but HNC Waay 220 not was 0.8 ppm first been higher but HNC Waay 220 not was 0.8 ppm first been higher but HNC waay 220 not was 0.8 ppm first been higher but HNC was 0.8 ppm first been higher but HNC Waay 220 not was 0.8 ppm first been higher but HNC was 0.8 ppm first been higher but HNC was 0.8 ppm first fir	IHIAC feed was below plan trie to high 5 S/C Wayy 200 and bottoms Wayy 600 product nitrogen results that were above the high limit of 1.5 ppm since 31/12. The LNF was starting the first 220R nur on the new calalyst load and due to concerns of high nitrogen feed deach could be reverable to ETC. The QCD was put ded on the HNC 6 S/C Wayy 200 stream and sent to ETC. The QCD result of 64/12 AM was 2.8 ppm, a check sample to ETC at 64/12 PM was 0.47 ppm per ETC (the overall CAT romanded without 146 pt, and the GCD coloring OCD sample on 65/12 AM was 1.5 ppm. The totowing day on 65/10 ms of 100 m	Did not approve operator rounds, however the issues at R-1410E were handled in a safe manner and everyone went home in the same concilion that finey showed up for work that day, things could have been different in the plant if step work authority wasn't used.	4 Cat feed maler needed to be calibrated for process balance monitoring. White attempting to zero the "B" faed melar, feed was momentarily chopped.	Radio 47 is central channel on the main radio system. The radio failed to operate leaving the refinery with one less control radio and one less radio for use.	' 0=	EE reported having a sore back when he came to work
	<b>€луіголтналіз</b> ∤	NL-Operational Process/Procedures - Safety Systems	NL-Transportation - Company	Business Process	Queliy	NL-Quality - Paperwork Incorrect/Not Sent	NL-Operational Process/Procedures - Safety Systems	NL-Business Process - Business Process	NL-Regulatory Compliance - Non Compliance - Water	Employes triury
(1) The guideline on the pressure control of the natural gas was not consistently Implemented. (2) Turnover between the nightshift and dayshift Board Operators was less than	(1) The guideline on the pressure control of the natural gas were not consistently implementate. [2] Turnover between the night-shift and dayshift Board Operations was less than adequate and tailed to highlight that the natural gas header pressure control was switched to menual mode. [3] As a result of the PRD lifting to the atmosphere, the following action items will be taken to be in compliance with the requirement of the Air District				·		(1) No trigger to remind Ops and Maint about risk of feed chops when working on feed melers., (2) Ops and maint did not recognize the risk of feed chop.	2	(1) Catalyst reactor wash water was dropped at an unknown time not entipered. (2) Reactor wash water ICP metals results wore not representative of the water dropped due to particulate metal that could be formed in water >8 pH.	

	Employee Injury	355 C-Cell, South by Burner 44, Lower deck Technician sxited truck to go kito Central Maintenance. His assistant remained in the fruck to walt. Il took the Technician lenger than he thought and the	Burner #4	103	Closed		Refinary	39254
ry/iliness -	NL-Inju	Green Card A too board came off from word by the railing. Location: SISO, Fr	Green Card. A toeboard came off from weld by the railing. Location: SISO, F-355 C-Cell South by	Near		id, 6/8/2012 2:30:00	Richmond CA -	3035
NL-Environmental - Operational Leak	NL-Env	Green Card. Steam feak on steam trap continuously, been leaking for a long time. Location: SISO/Bounday to NISO, 468 Platform 50' South	Green Cerd, Steam bak on steam trap, Location: SISC/Roundary to N SO, 468 Platform 50' South	Near Loss	Closed	id. 6/6/2012 1:00:00 PM	Richmond CA - Refinery	39253
Nt-Injury/liness - Contractor Injury	NL-int-		Green Card. Anchor bolt slicking out in the ground. Location: NHT/F-410 West of F-410 Burner#8	Near Loss	Closed	id, 6/6/2012 8:00:00 AM	Richmend CA - 2 Refinery	39252
Nt-Environmental -	Nt-Env	Green Card Overhead sleam leak down to pump needs to be fixed. Also need insulation removed and resed scattoid to get to the leak. Location: D&R P-1178	Green Card, Overhead steam leak, Location: D&R P-1178	Near Loss	Closed	d, 6/4/2012 8:00:00 AM	Richmend CA - Refinery	39251
NL-Environmental • Operational Leak	NL-Envi Operatio	Green Card. Steam leak on the valve, Location: D&R 30' Wast of V-1198	Green Card. Valve steam leak, Location: D&R 30' Wast of V-1198	Near Loss	Closed	6/4/2012 9,00:00 AM	Richmond CA - D Refinery	39250
Nt-Environmental - Operational Leak	Nt-Envi		Green Card. A bad steam look evenhead to wakway. Location: D&R P-1148	Near Lass	Closed	d, 6/1/2012 6:00:00 AM	Richmond, CA - B Refinery	39249
NL-Environmental • Operational Leak	NL Envi Operatio	Green Card. Tank T-1108 2" Bleeder missing a pilug. Location: 4 Cat	Green Card. Tank T-1108 2" Bleoder missing a plug. Location: 4 Cal	Neer Loss	Closed	ы, 5/31/2012 2:00:00 PM	Richmond, CA - Refinery	39247
//Illness -	NL-injury/iliness : Employoe injury	Grean Card. I've noticed a let of small particles of non-skid paint on the star's, ramp and the porch of the training building al Gate 91. There's a great chance someone will elip and fall. Location: Gate 91 Training Bidg	Green Card. Small paint particles on the stairs and ramp. Location: Gate 91 Training Bidg	Near Loss	Closed	ki, 5/30/2012 6/45:00 AM	Richmond, CA - Refinery	39244
NL-injury/liness - Contractor Injury	NL-injur Contrac	Green Card. While bottle watching, I observed several workers enter fresh air area via rec bardcade lepe. They went in to assist/oversee work being done. There was two workers under fresh air while they entered. Location: RLOP-13 Plant.	Green Card. Several workers entering fresh air area via red barricade tape. Location: RLOP 13 Plant	Near Loss	Closed	kd, 5/29/2012 6:30:00 PM	Richmond CA -	39243
Nt-injury/filmess - Contractor (njury	Nt-Inju Conirac	Green Card. While coing tresh air job, I witnessed a worker entening tresh eir area and entening through red berricade tape. Location: RLOP 13 Pieri	Green Card. A worker enlering fresh sir area with barricade tape. Localion: RLOP 13 Plant	Near Loss	Closed	rd, 5/29/2012 7:30:00 PM	Richmond, CA - Refinery	39240
RL-Transportation - Contractor	NL-Transp Contractor	Green Cand While diving to ranch to relieve a few pallets, I began to hit some pretty long pohioles which I couldn't see even with my high beam lights. Location: Ranch North Yard	Green Card. Big potholes need repair. Location: Ranch North Yard	Near	Closed	1d, 5/28/2012 2:30:00 AM	Richmend, CA - Refinery	39238
NL-Environmental •	NL-Env Spir	While training at the fire drill grounds CFD and fire brigade were flowing copious amounts of water. The high runnoff into the process sewer reterm that runs to £2 sap was overwhelmed resulting in an overflow (4 a mainted at the 100' channel. The overflow involved a small amount (< 1 barrel) of recovered oil that was being pumped from the #13 sop lookbox (focated just north of the drill grounds) for £2 sap flow splitter using the same sewer line.	Process sower fine averiflowed into 1007 channel bolid fire drill grounds due to excessive flowstrestricted fine	Near Loss	Clased	nd, 647/2012 10:30:00 AM	Richmend, CA - Refinary	39237
NL-Injury/Ikness - Contractor Injury	NL-inju Contra	Green Card, Three contractios were trying to see a plug on the bottom side or a container. It was a gradelf with a storage container on the forks. Location: I Wash Pad	Green Card, An operator should be in cab at all times. Location: Wash Pad	Near Loss	Closed	nd, \$128/2012 1:30:00 PM	Richmond CA - Refinery	39236
NL-Business Process - Business Interruption	NL-Busines - Business interruption		Cracking LCN History Data Gaps	Near Loss	Fact Gathering	rd, 5/24/2012 9:23:00 PM	Richmend, CA - Refinery	39212
Business Process	Busine	Tank 979 over exceded cleaning budget budget due to unanlicipated skudge noide the tank	Tank 979 Clean up Cost Overrun	Loss	Closed	к, 6/7/2012 12:00:00 АМ		39193
oss of Containment	F0\$\$ 0	the vapor recovery needs to be in placed while loading tust. After loading fuel oil, and after shutting down the vapor recovery in berth # 3, the natural gas pressure want up and caused the PRO to referve for 9 mins, Furthler investigation showed that the seturing gas pressure control was switched from auto to manual control last June 6 nightishit.	About 145 ib of Natural was released to the atmosphere when the Natural gas PRD lifted	rass.	Closed	xd, 6/6/2012 3:00:00	Richmond, CA - Refinery	ap;61

3944В	39445	39395	39394	39372	39269
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6/8/2012 8:50:00 AN	8/6/2012 6:00:00 PM	5/25/2012 10:00:00 PM	8/13/2012 12:00:00 AN	เลย เลย 1140:00	<i>0/7/2</i> 012 3:30:00 PM
Closed	Closed	Closed	Closed	Investigation	Clased
Near Loss	Negr Negr	Loss	Coss	Near	Near Toss
n: Mag	Green Card - While driving out of the Tech Center parking lot, I neticed someone smoking a cigaratte in the parking let	K-940 shutdown for packing leek and valve damage	MK-910 found to have	Loss of fresh water to	Vehicle left running and was un occupied
Green Card. Security personnel have been seen exiting their vehicles and leaving them canning while opening gates. This is a violation of Chovron pokey because it is a dangerous thing to do and has gotten people injured in the past.	As I was driving out of the Tech Center parking lot, I noticed comeans emaking a ciganatis in the packing for, I pated back in and parked my car, I esked the person to put the ciganete out, let them know what our policy is and pointed them in the direction of the nearest smoking post. They hanked me for feiling them know what our policy is.		K-910 was shuldown on 5/13/12 for scheduled 5 year electrical PM work. During the Inspection extensive motor damage was discovered. The motor was pulled and sent to Koffler Electrical for inspection and repair. The original repair was scheduled for six days and the entire napair exteatly look 20 days. The damage is believed to have been caused by excessive heat.	A Utility system isolation was required for the maintenence crew to replace a fresh water monitor. This isolation required communication with all customers associated with the isolation according to current are a PBIC's. This was completed before isolation started. However, the Truck Loading Facilities custiled the reference 2 hours with this water (or specific started before isolation started. However, the Truck Loading Facilities custiled the reference 2 hours with this water (or specific started before isolation started. However, the Specific Specific started before isolation started.	assistent earns inside to check and see where he was. The assistant did not show whice off before exiting vehicle and left it running in the parking for. Talked to Technician and assistant, Reviewed the rules regarding vehicles and itself itself extend unaltended, which is not permitted, light a commitment from them both to highten their awareness in all of their activities. Safety meeting will be held again on Akondary morning discussing the Topic of vehicle cately and the Rules and Regulatione in the Refinery.
NL-Injury/itmoss -	Peusean suossean-y	Equipment/Property Damege	Equipment/Froperty Damage	NI-Business Process - Business Process Interruption	NL-Transportation - Contractor
		(1) Why did K-940 #2 cyliner and #4 cylinder experience valve damage. Because his discharge temperatures got hot erough to cause physical damage. Why did the discharge impentures get hot. Exect cause carnot be determined at this time. Meinbrance could not determine snything out of the ordinary that specifically caused valve damage.	(1) I temperature monitoring was not sufficient to reliably altermine the actual temperature of the statior. (2) Cooling Towicapacity was inadequate to keep the motor within its design temperature limits. (3) Alarms and automatic SD institumentalism is inadequate to protect the motor from overhealing. Temperature information is not integrated into the DCS system, highling the troubleshooding and failure were not properly defined and prioritized to meanage replacements of equipment.	(1) "FIVIE" WHY" Incident Number 19972 Business Unit USE Location Distribution system Facility Name Markettry, Truck backing nacks incident date 692/2012 Type of Process: Fresh Water Type of Equipment: Utility System Toam Members: D.Zemmerman Silbeoy Reynolds Incident Description: What: Truck thading racks lost all Yesh water for fire proteoticny/clinking valer. Where (location or where in the process): Marketing - Richmond Vihent, Occurred on 693 Day Shift How: Incorred FABID's of drawing for this area. Problem Silberment (What is the Iver) issue that need to be addressed?): Revise PADID to reflect this coustomers sesciated with fresh water on drug #* = 255/126 3.25/128-12 FIVE WHY'S 1. Why old "above happen? Vanification Fresh water is chalison was performed by Utilises Operations for malintenance. 2. Why old "Thappen? Isolation verification was performed and customers notified as gen PABID ## = 255/226/225/225/23/23/23/23/24 Nay did "Thappen? Trock Racks was not an indicated customer of this service, therefore not notified 4; Why did "Thappen? Trock Racks was not an indicated customer of this service, therefore not notified 4; Why did "Thappen? Trock Racks was not an indicated customer of this service, therefore not notified 4; Why did "Thappen? Trock Racks uptain not not real was the Vice Why of the Standard was the Vice within no fresh water to heir facilities and needed to Strue perations for 2 house 600°C CAUSE: What was the Road Cause of your incident? Operations to Procedure to the Procedure of the pro	
	Green Card. Security parsonnel exting their rechmond, 6/8/2012 Richmond, 6/8/2012 Rechmond, 6/8/2012 Rechmon	Richmond, 6/62/2012  Refinery PM Cosed Loss edgardis in the parking lot. I noticed comeone smoking a parking lot, I noticed comeone smoking a comeone smoking a parking lot, I noticed comeone smoking a comeo	Richmond, 575/2012  Refinery PM  Closed Closed Cost of the Tech Center parking left was calcing leaf was discovered.  Green Card - While driving leaf was discovered.  Green Card - While driving leaf was discovered was calcondated in the parking lot, I noticed comeons emoking a cigarette in the parking lot, I noticed back in and parked my car. I asked the cigarette in the parking lot, I noticed back in and parked my car. I asked the cigarette in the parking lot, I noticed back in and parked my car. I asked the cigarette in the parking lot, I noticed back in and parked my car. I asked the cigarette in the parking lot, I noticed back in and parked my car. I asked the cigarette in the parking lot, I noticed back in and parked my car. I asked the cigarette in the parking lot. I parked back in and parked my car. I asked the cigarette in the parking lot. I parked back in and parked my car. I asked the cigarette in the parking lot. I parked back in and parked my car. I asked the cigarette in the parking lot. I parked back in and parked my car. I asked the cigarette in the parking lot. I parked back in and parked my car. I asked the cigarette in the parking lot. I parked back in and parked my car. I asked the cigarette in the parking lot. I parked back in and parked my car. I asked the cigarette in the parking lot. I parked back in and parked my car. I asked the cigarette in the parking lot. I parked back in and parked my car. I asked the cigarette in the cigarette in the parking lot. I parked back in and parked my car. I asked the cigarette in the parking lot. I parked back in and parked my car. I asked the cigarette in the cigarette in the parking lot. I parked back in and parked my car. I asked the cigarette in the cigarette in the parking lot. I parked back in and parked my car. I asked the cigarette in the cigarette in the parking lot. I parked back in and parked my car. I asked the cigarette in the cigarette in the parking lot. I parked back in and parked my car. I asked the cigarette in the cigarette in the parke	Richmond, 5/13/2012 CA- 12 00.00 Refinery AM Closed Closed CA- Refinery AM Closed Closed Closed Ca- Refinery AM Closed	Richmond, 69/2012 Investigation Near Local Creat National Control of the maintenance control of the ma

39460	39450
Richmond CA -	Richmond Reference
6/1/2012 9:00:00	8/1/2012 9/02/2012
Investigation	investigation in Progress
Logs	New
Lab Operator's Personol H2S Monitor sounded a	Lab Operator's Personal H25 Motitor sounced a
INITIAL DESCRIPTION: SEE LINK ATTACHED NI INVESTIGATION FOR COMPLETE TOP REPORT. While proparing a sample for gravity measurement by dentity moter, a GCD Operator's personal H2S monitor sounded a warning.	INITIAL DESCRIPTION: SEE LINK ATTACHED IN INVESTIGATION FOR COMPLETE TOP REPORT While propering a sample for graffy measurement by density mater, a OCD Operator's personal H2S monitor sounded a warming.
NL-Operational Processor Processor Durating Limit Set Operating Limit (SOL) Exceeded	NI-Tijuy/iliness -
(1) Exhaust System in RNA107 lacks sufficient ventilation to safety perform density analysis, outside of furne hood, conventions of 1725. (2) Communicate to Charlette the extractions of the surface soft histopopouve to H25 in samples containing elevation of the conventions of the surface of	be broken for suspected of having alterated levels of H2S are to be broken forwn for of selfschion, under a hood. Any subsequent testing for density is to be done under a hood ving the portable hand-held density meter. (3) "FWE WHY." One Page Report incedent kumber 34805 business Unit QCD Location Bidg35-1107 Facility Harne QCD Incident date 6172012 Type of Floress: Routine Lab Testing Type of Equipment: Team Mombers: Adem Wilfiams Jr. Incident Description: Whet: White praparing a semple for gravity measurement by density meter, a QCD Operator's personal H2S motilior sounded a warming allem, Where (location or where in the process). Incident occurred in aur Physical Lab (FMT107) in the serie where we conclud density (gravity) measurements. When: Incident occurred June 7, 2012 at approx Sam. How, Alarm sounded because a sample of C1200 Napthe contained a concentration of H2S above the tigger limit of 5ppm. Problem Stamment (What is "the key issue that foreids to be addressed"); Resently, there has been an increase or ARS personal monitors sounding alarms in the page of Rm1107 where we measure density of a flower happen? Verification. The H2S monitors are bounding warning alarms because our density in the safe of our density in the safe of the page of the process of the safe of the safe of the page of the process of the safe of th
	Lab Operator's Personnal 90000 Investigation Hear H2S Monitor sounded a Vy daylety meter, a COD Operator's personal H2S Monitor sounded a by daylety meter, a COD Operator's personal H2S monitor sounded a warning. (SOL) Exceeded

https://impacterm.chevron.com/IMPACT/ANYWHERE/Reports/exports/scenario_159134_f8a5390b-1e90-4874-b012-4d17412a3a40.htm 8/9/2012

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	6/14/2012 5:34:00 ANI	6/11/2012 12.00:00 AM	0/12/2012 3:00:00 PM	6/8/2012 5:00:00 AM	6/13/2012 7:15:00 AM	8/12/2012 9:50:00 ANI	5/16/2012 12:00:00 AM	6/11/2012 3:00:00 PM	0/12/2012 8/00:00 AM
	Closed	Closed	Closed	Closed	Closed	Closed	Fact Galhering	Ciosed	Investigation
	Near	Loss	Near	Near	Near	Near	L Near	Loss	Loss
	Main Goto - Berrier erra hit an individual on the head	Hydrocarbon Found in Air Line	Contractor's personal H2S monitor starmed	On Deck Security for the Florida Vayager energized personal ceil phone on deck while the vassel was loading gasoline.	Operator uses Stop Work Authority on Welding Job	KOOOA compressor	Low arsenic in MEA solution, below lower limit of 100ppm	Technician was VOC monitoring at T-3102 and his wrist touch steam tracing.	Vacuum tuck siack damaged on clearance chein
	Approximately 0534 an Individual were struck by Main Gates barrier arm. Officer at MG instructed driver to drive into the parking to it to park and come back to MG to pick up a parking pass. Individual did what the Officer instructed and weak to MG after parking their vehicle. Person crossed the sireal through the new Miding zone while the barrier arm was in an up position coming down Officer of not see it come down on the person but head the teach down Officer of not see it come down on the person but head the barrier arm bumpared the persons head. Person seld they was okey and proceeded to work.	While performing work in FCC near R280 a contract welding crew located an airline and opened it to test for operation prior to connecting their air hose airline and oppositing the valve a small amount of light hydrocamon liquid came out followed by hydrocamon typers. The contractor immediately closed the valve and informed the area OMC. During the contractor WIP audit on Tuesday the contractor shared the incident with the team, upon seeing the two valves with open Thor fitings on the ends and no "To Not Operate" lags on them the subject of the walves out of service.	Two contractors smalled whift of H2S odor and one of their H2S monitors alammed while vorking near a portable lank containing sulficio caustic at the 2A Separator. Contractors noticed that a vert hose convecting the sulfidic caustic lank to a pair of yeapor carbon drums had a yisible hole.	il Master notifed PPS security of the violation and citical setisy concern nigariting call phone usage, conductivity and energizing uncontrolled non-infilmitically setie source. Master reported holdern to CSC Area Operations Coordinater. PPS security officer was using a cell phone to call for fruir relief who was tall of that failed to relief them.	INITIAL DESCRIPTION: SEE LINK ATTACHED IN INVESTIGATION FOR COMPLETE TOP REPORT. While performing first rounds in the CFO area, I cound a contractor welding crew inside (in the plant) of it's pump stellant set up and just about to strike an arc to weld a fire pipe line directly edjacent (within 10) to the NHT sour gasatine pump and within. 3 of the LHT pump, Neither I nor my H.O. were aware that this crew was doing anything like this. The crew did not have not work permits, and the permit they did have was inapplicable to the work they was doing. I asto seemed like they had not signed in all the permits of the control Room. They did not have the proper equipment and safety goal to contial that sparks, nor was there a Fire Welch with any type of freelinghing to continue present. There was no Chevron Safety Operator present, as well.	1) K300A, natural gas compressor shuldown due to loss of IAP302A lube oil pump causing own lube oil pressure, 2) Molor pump MP303A is a spare to primery IP203, 3) During the weekend TP-303 attridown when linere was a steam pressure bounce that affected the IP203 tipo of pump. The APS failed to switch over the MP302A. 4) Ops decided to pull MP303A as the lead and it shuldown shortly thereafter.	Arsenic in MEA enalytical results were not available for 4 weeks due to a broken machine at QCD tab. Operations/PED was not sawere of this until they noticed no tresults were evailable and inquired with QCD and learned that the machine was out of order and would not be replaced for up to 2 months. The consequence of the green in he MEA is accelerated controllon in the MEA is accelerated controllon in the MEA is accelerated controllon in the MEA.	Technician was VOC monitoring at T-3102. He was underneath a cakvalk.  Tech resched over to shift a valve and gct burned by steam tracing on his left wrist. Date 6/11/12 Time 3.00 PM.	Vecuum truck driver was directed by Chevron safely operator to attempt to make it under a low clearance ares. Chiver volcud concern about clearance problem. Operator derected driver to try while he spotted for him. He cleared the chain, but used stop work authority rather than attempt to clear play reck. Upon tracking up back through the chain the charge in angle was enough to raise the truck to whore the stack of it came in contact with the chain on the way out, causing the stack to bend forward.
NL-	NL-injury/liness - Empinyes injury	NL-Lessons Learned	NL-injury/liness - Contractor injury	NL-Security - Misconduct by Employes or Third- Party - Policy violations	NL-Business Process	NL-Operational Process/Procedures - Plant Run Ou/Slow Down	NL- EquipmenVProperty Damege - Equipment	tnjury/lliness	Transportation
		(1) Line was not tagged out of service/Do Not Use., (2) Fydrocabon entered plant air service line.			(1) Plant boundaries are not clearly defined. (2) Lack of communication of the ownership of the area, (3) R1-341 wording around the 35 ft from plant boundary needs improvement. (4) Signage on #5 substitutor which stakes no work can be done within 100 ft of the substitution has brought a some confusion as to what specific work can and cannot be done there	(1) sea altched ( ink to the right for אלין) נאס (ני) אונים (ני) אלין.		(1) Alihough Hot surfaces was mentioned in JSA, Steem tracing was not listed. Being more specific when identifying hezerds would greatly decrease likely hood of burn.	him. During the investigation he mentioned that he felt uncomfortable prior to "trying." Why didn't the driver exent stop work authority wrise in feit uncomfortable attempting to clear an obviously low clearance serse? The desire to please the operators he was working with out-weighted his concern over making it under the clearance, bestdest they were going to spot him in. Why didn't the driver call his supervisor to express his concern about going into a low-clearance area, and possibly got a lower-profile funck assigned to the job? He knew his supervisor was very bury at that time, and felt hat since the operators were reassuring him that they would spot him in to the area to avould be okay to proceed without involving his supervisor.

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	39782	39781	39772	39772	39731	39728	39723	39718	39660
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	6/17/2012 4:00:00 AM	6/16/2012 9:00:00 PM	0/10/2012 12:00:00 AM	6/16/2012 12:00:00 AM	8/14/2012 3:00:00 PM	6/13/2012 1:00:00 PM	4/7/2012 12:00:00	6/14/2012 10:20:00 PM	CA - 12:30:00 CRefinery PM
	hyestigetion in Progress	Cosed	Closed	Closed	Closed	Closes	Investigation In Progress	Closed	Cipsed
	Loss	Loss	Loss	Near	Near	LOSE Mark	C Ne Pr	Loss	Near
	Fire in SDA P-126A	Operator strained muscle in leg	MCO cooler failed teaking MCO into plant water header	MCO cooler failed teaking MCO into plant weter header	Slight Jel Hydrccarbon Wesp T-3185 Fil Line/Dead Log	Green Card, Walkway planks are deteriorated. Location: West and of Poly Plant	Network Switch Feded	Vehicle made contact with definanter resulting in a dented fender.	Green Card - Contractor doing repairs RR tracks
INITIAL DESCRIPTION: SEE LINK ATTACHED IN INVESTIGATION FOR COMPLETE TOP REPORT. At approximately 4AM 0/17 a km sest pressure	INITIAL DESCRIPTION: SEE LINK ATTACHED IN INVESTIGATION FOR COMPLETE TOP REPORT. At approximately 4AM 6472 it low seal pressure alarm energized on the OWS it board for P-128A on South toernax. Minutes alare a report of a seel for on P-128A outboard seal was given and CFD year called. His monitors were setup and CFD also put water on the pump seal. In approximately 10 minutes the film was extinguished and a small amount of vapor continued to wisp from the seal CFD is standing by	Al Approximately 9 PM on 6/19/2012 a Hydroprocessing EE was exiting off their blogde, when their lag got caught in the rast basks) of the blogde. The EE monets to pull their lag from the basks when they fell a tightening and pain in the basks of the lag. The EE informed the 4O and STL and Flant protection was called in. The EE was sent to the clinic tor, where revenibles	MCO Sample cooler lailed allowing MCO to back into the plant water header. This water also supplies the chiuge system	MCO Sample cooler tailed allowing MCO to back into the plant water header. This water also supplies the deluge system	Slight Weep T-3185 Dead leg under Standard Rd discovered during reinapocition of the 3185 fill line.	Groen Card. Walkvey plenks deteriorated. Has created gaps between planks. Missing hard and indicate. Peals and haseder shuky, Stellis stering to at. This is access to 8" with sael valve with VOC Tags 0120-00113 attached, 8" insulated pipe marked 130A Line. Localion: Pole 81 across from westend of Poly Plant, 1abfflod mails that with dog houses Afty-Poly Plant, 1abfflod mails that with dog houses Afty-Poly Plant, 1abfflod mails shed with dog houses Afty-Poly Plant, 1abfflod plant pl	Natwork ewitch falled, rendering all Gil. network services inaccessible at the South Isonax Quiside Centrol Room. The duration 126 Gl. network services for that location were unavailable was approximately 12 hours. The number of people effected were the 23 operators on shift at linat control house during the failure. Turnovers and inhela fract downdrads could still be accomplished at the main Hydroprocessing Centrol Center. Since we had a replacement network switch in our transforcy, the cost of the incident was the one network analyst's lime to replace the switch, which is \$1300.	At approximately 20.20 has the patrol officer was driving down Xylene Street fraveling from 141 Gate lowerd 91 Gate. The driver veeted to the left and the left front fonder made contact with a heavy gauge plastic road defineator. This contact resulted in a scrape and small don't the patrol wholices left front funder and left if the patrol wholices left front funder and left front door. There was no damage to the delineator.	Contractor was coing repairs on RR track and was using a chain stached to the vertical structure of the technology (Gradoli) fock carriago. Contractor must use manufacturer's approved method of lifting toats.
	Loss of Containment	injury/iines*	NL- Equipment/Property Carnage - Equipment Carnage	NL-Environmental - Operational Leak	NL-Environmentat - Operational Leak	NL-injuryiknass -	NL-Business Process	Transportation	Equipment/Property Damage - Equipment Damage
		(1) Why disOperator hybred leg getting on a bleyche? Operator caught leg on rear basked of bleyche. Why did the operation caught leg on rear basked of bleyche? Operator caught his leg on the rare basked the belyche because this taken the such that the baske is a bit higher for him than other operator and he typically has swing his leg a little harder to Clear the rear basket. It's is a known hazard to the operator being a known hazard why did operator only swing only from the Known hazard why did operator not swing leg over far snough? Froper LESA was not performed on it's hazard.		(1) mechanical failure and of sie			(1) Why? Citica Switch that was approximately two years old field. Why? Initial examination does not reveal a root cause. Power Supply was chacked, unit was visually inspected and boards were clear not not diffy or cause. SPE pullink connection module was checked, unit was visually inspected and boards were clear not not diffy or cause. SPE pullink connection module was checked, in proper working condition. Did online search for issues and it was tinondusive, a different version of operating supervisory image was installed (an older version, newest was befoatly installed) and the arrivation of operating supervisory insight was installed (an older version, of operating supervisory) insight of the continuing observations of the visual cause in the steen inconnectable that falls packedically. Unli has been replaced and new unit has been running fire for past two menths. Unit is continuing to be monitored to see if two can obtermine a root cause and repair it. If not, then we will dispose of the quickness, it is cheaper to have systems on hand in our inventory. Why?? Fallers of electronic module used in the Network infrastructure that no root cause has been able to correct its current unreliable state.	(1) Momentarily distraction white driving Investigation reveals the supervisor was reaching over to edjust the hear in hear vehicle, and in so doing, cause the steering wheel to turn left white site was reaching to meright. By the time site immediately related her programed renor and corrected her steering, the vehicle had come in contact with the "K-(Tail" type plastic delimetant that was there as a lence protection device on a work site where there were steel plasts account on a work site where there were steel plasts account need, and delimeator set was the said a lence protection for the mod which also caused the road-way to be nerrower than normal at that particular juncture. The driver was able to correct her steering without demanging CVX property and with minor cosmetic damages to the contractor vehicle.	

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	39867	39866	39864	39864	39847	39782
and a second sec	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond. Refinary	Rehmend,	Richmond, CA - Refinery	Richmond, CA - Refinery
	6/18/2012 2:00:00 PM	6/8/2012 1:00:00 PM	5/1/2012 12:00:00	6/7/2012 12:00:00 AM	6/18/2012 12:00:00 AM	6/17/2012 4:00:00 AM
	Closed	Closed	investigation	investigation	Closed	Investigation In Progress
	loss	Near Loss	Loss	Loss	Near Loss	Loss
	Operator reported soreness and swelling of one knee due to a hug bite	Brief Filernaker Outage	Customer Cuts -	Customer Cuts - Purchased Product	Losi key for LOTO Box In1333 installed in 2002	Fire In SDA P-126A solevent pump
	The LPG Rax Operator reported to their supervisor screness and swelling in one knee. The Operator believed it may have been a bug bite.	Users were not able to see friemaker data in correct form view white filemaker was being updated. "Why? - Production copy of filmaker was being updated and developer had to change form view to loble view to update the data. Why? These changes were required in table view and developer didnit switch back to form view in time.	in June 2012 Richmond Lubicanis Plant (RLP) underwent five customer cuts due to unavailable stock. The products that were unevellable are purchased from the Deita Melainie plant (DLDP) and stock fransforred to Richmond via Infermedia Versiti, RLP placed an order against DLDP with the expected receipt date of May 31. The order requested eight different products with various quantifies to make-up a full truck load From the eight products, RLP realized for exts pertaining to three products. The exts could have been avoided if the shipment would have strived on the expected areaint date. The cuts varior realized between 531 and 6th. The expected areaint and the shipment would have strived on the expected areaintyal date. The cuts varior realized between 531 and 6th. The expected invalidation for the separated varior three strived on the shipment three shipments are shipment to chavron togatics (organized was not weighted at three of loading Mon. 614 – Bework Approvel request sent to Chevron Logatics (organized Mon. 614 – Bework Approvel request sent to Chevron Logatics (organized Mon. 614 – Bework Approvel request sent to Chevron Logatics (organized Mon. 614 – Bework Approvel request sent to Chevron Logatics (organized Mon. 614 – Bework Approvel request sent to Chevron Logatics (organized Mon. 614 – Bework Approvel request sent to Chevron Logatics (organized Mon. 614 – Bework Approvel request sent to Chevron team approvers re-work Ved., 617 – Load arrives RLP at Professional Conference of the product of the sharp of t	In June 2012 Richmond Lubicanis Plani (RLP) undownent five customer cuts due to unavailable stock. The products that were unavailable are purchased from the Delta Metaline plant (DLDP) and sock transferred to Richmond via memodal transit. RLP placed an order against DLDP with the expected acepit date of May 31. The arder requested eight different products with various quantities to make-up a full nuck load. From the eight products, RLP realized five cuts pertaining to three products. The cuts could have been excited the cuts pertaining to three products. The cuts could have been cuts were realized between \$511 and \$16. The expected arrival date of these products was May 31 although RLP did not receive until June 7. The first first as follows: Thurs. \$531 - Expected receipt date from DLDP to RLP Fit, 611 - LB Huni (carrier) requests are work to \$11 for Chevron approval Fit, 811 - SL1 requests weight lickels at time of loading Mon. \$64 - LB Huni confirms that load was not weighed at time of loading Mon. \$64 - LB Huni confirms that load was not weighed at time of loading Mon. \$64 - RLP rollow-up with Schnelder to understand delayed arrival of shipment Tues. \$65 - Chevron team approves re-work Wed. \$67 - Load errives RLP at \$5.15 am	Must have key cut off breakers for T-3182 Mixer	alarm energized on the OWS 1 board for P-126A on South Isomex. Minutes later a report of a seal file on P-126A outboard seal was given and CFD was colled. File monitors were set up and CFD also put weller on the pump seal. In approximately 10 minutes the file was sukinguished and a small amount of vapor continued to wisp from the seal CFD is standing by.
	injury/illness	NL-Business Process - Business Interruption	Operational Process/Procedures	Business Process	NL-Operational Process/Procedures - Safety Systems	Fire/Explosion
(1) Did not follow current lest method FIVE WHY'S 1. Why did "above "happen? Verification LOSS OF P-553/553A LUBE OIL DISCHARGE PRESSURE TO K-550 K-550 KD DUE TO LOSCHARGE PRESSURE TO K-550 K-550 KD DUE TO LOW LOO PRESSURE 2. Why did "1' happen? BOTH P-553 & 553 BOTH OFF WTHINIA NA 8 SECOND TIME FRAME ALARM JOURNAL SEQUENCE OF EVENTS 3. Why did "2' happen? APS P-553/553A TEST METROD NOT FOLLOWED DISCUSSION with operation on alarm journal SOE. What over current test method in field. ROOT CAUSE(S): What were the Root Causes of your incident? Add more as needed 1 Not following current test method for P-553(A) APS testing were the Root Causes of Your incident? Add more as needed 1 Not following current test method for P-553(A) APS testing asks and tenter of the incident – add more as needed) 1 Discussed with operation the will be fact on the Root Cause of the incident – add more as needed) 1 Discussed with operation method. Due Date: 619912 Completed Owner: Scott Kawahara Date R-555 Or to due to lube a lip monps P-553-553. After 12 One 147 GUS 4,559 operator Dave Wolden attempted an APS test on K-550 recycle compressor tube oil	(1) Employee reported discomfort in knee with no inggering event, reported to supervisor as a precaution.		(1) Whal?: RLP experienced five customer cuts of purchased product from DLDP Why? Expected shipment from DLDP arrived RLP on 6/7 Instead of planned ETA of 5/31 and insufficient safety stock to cover customer orders Why? Shipment required rework upon intermodal arrival at carner (18 Hunt) in California before 5/31 Why? Axet weight on shipment expected CA DOT veright residiotions Why? Load was not scaled at origin Why? Driver (carrier) did not follow standard protocol of scaling at origin, (2) What? Why did RLP have insufficient safety stock to cover customer orders Why? Alway product se RLP has yet to undenstand purchasing pettern and relabel inventory strategy Why? Demand has conlinuously exceeded RLP supply on these SKUs	(1) Whal?: RLP experienced five customer cuts of purchased product from DLDP Why? Expected shipment from DLDP arrived RLP on 6/7 instead of planned ETA of 5/31 and insufficient safety stock to cover customer orders Why? Shipment required rework upon intermodal arrival at carrier (18 Hurtl) in California before 5/31 Why? Axel Weight on shipment exceed CA DOT weight restrictions Why? Load was not scaled at origin Why? Driver (carrier) did not follow standard protocol of casting at origin, (2) What? Why did RLP have insufficient safety stock to cover customer orders Why? Demand has confinuously exceeded RLP supply on these SKUs		(1) There was an outboard seel leak the ignited sterling a fire. Why was there are out board seel leak? Seel leak due to probable seel failure

39808	39903	39870	39 003 0	3985 <b>6</b>
Richmond, CA - Referency	Richmond CA - Refinery	Richmond, CA -	Richmend,	Richmond, CA -
6/19/2012 10:45:00 AM	5/12/2012 9:00:00 AM	6/18/2012 10:00:00 AM	6/19/2012 8:47:00 AM	5/18/2012 8/47:00
Closed	Closed	Clored	hyestigation h Progress	hyestigation in Progress
Loss	Near Near	Loss	Coss	Loss
Driving in wrong fana by Scale house	Green Card. A water leak from pipe clamp needs to be fixed, Locaton; FCC - Waterfall North of E-742	While installing P-335, the discharge fange on the pump broke white being tightened.	Loss of K-550 recycle compressor which led to Short Sub and Recuest affecting various units.	Loss of K-550 recycle compressor which led to 5 Rhen 5/D and HZ Issues affocing various units.
While driving into the retinery from at gate I was paying more attention to the trucks at the scale house and drove in the wrong lane.	Green Card. A water leak out of pipe clamp needs to be fixed, it locks like it nas been leaking for a long time and also needs scarfold and a deck to get out to the leak. Location: FCC - Waterfall North of E-742	Mechanics were installing P-335 in SISO. White they were tightening up the discharge dange, the flenge broke on the pump.	Loss of K-550 recycle compressor upon lube oil pump P-553 & 553A APS testing. During the lests ession, oil discharge pressure was lost which idibialed the K-650 S/D. This in turn S/D 5 Riben, and caused H2 Issues which affected other D&R orbit inchuding H1,INHT, DHT & ARhen. Also including Neth Yard which freed up H2 to help out.	Loss of K-550 recycle compressor upon tube of pump P-553 & 553A APS setting. During the first ression, oil discharge pressure was test which initialed the K-550 StD. This in turn StD 5 Rhen, and caused HZ issues which effected other DSR wrist including. JHT, NHT, DHT & 4Rhen. Also including North Yard which freed up HZ to help out.
NL-Transportation -	NL-Environmental - Operational Leak	EquipmanUProperty	Business Process	Operational ProcessProcedures
(th) Problem Stellement (What is the key issue that needs to be addressed?). Driving in the wrong lembwrong side of the street. FIVE WHY S1. Why did "above" heppon? Verification Was paying too much altention to the fructs at the scalehouse. 2. Why did "1 heppon? Was trying to identify the driver of the fruck, 3. Why did "2" happon? Thought he driver was someone I know. ROOT CAUSE. What was the Reot Cause of your incident? Yas paying attention to the task at least of your find the frucks. It is not continued to the sake at looked to see who the driver is and nothing bad has happened.		(1) incident Description: Mechanics were installing 0-335 in SISO. While they wore lightning up the discharge harpe, the flange broke on the pump. FIVE WHY'S 1. Why did "above" happen" Verification Cast from flange was corroded and weaken over time 2. Why did "1 happen a pump have flat flace gastet surfaces, but had a gap and a pivot point around gastet surfaces, but had a gap and a pivot point around gastet when being lighten 3. Why did "2" rappen "Verong gastet (spiral wound) used when beiling up pump. A. Why did "2" happen "Wenon gastets used in past with no issue, replaced "in kind" 5. Why did "4" happen "Mechanio dun't realize wrong gastet storious of work in warrang, storious more in the surface of the surface	(1) bid not follow current test mothod FIVE WHY'S 1, VMy did shows "happen? Verification! LOSS OF P-5520554 LIBE OIL DISCHARGE PRESSURE TO K-550 K-590 SID DUE TO LOW LO PRESSURE AWAY did "The Appen? DOTH P-553 & 553.4 BOTH OFF WITHIN AN IS SECOND'IME FRAME AAAM JOURNAL SEQUENCE OF EVENTS 3, Why did "Zhappen? POTH P-553 & 553.4 BOTH OFF WITHIN AN IS SECOND'IME FRAME AAAM JOURNAL SEQUENCE OF EVENTS 3, Why did "Zhappen? POTH P-553 & 553.4 BOTH OFF WITHIN AN IS SECOND'IME FRAME AAAM JOURNAL SEQUENCE OF EVENTS 3, Why did "Zhappen? P-553.4 BOTH OFF WITHIN AN IS SECOND'IME FRAME AAAM JOURNAL SEQUENCE OF EVENTS 3, Why did "Zhappen? P-553.4 BOTH OFF WITHIN AN IS SECOND'IME FRAME AAAM SOOF CONTROL CONTR	umps P-553-553A as part of his daily dubes for 0/18/12 dayshk. A 3rd kinnday of the morth task as scheduled per the D&R routing dubes calendar schedule. No restrictions or abnormal conditions prior to the pump APS testing, K-550 operating at romate conditions and 5 Rhen , rates @ 23 dispD - 08/45. Starting time on APS pump test e - 08/45/00 The L/O pumps were in the following operating slatus prior to the APS testing, P-453 in "AUTO" for APS testing, [Standby Mode) P-553A in "RUN" status (Operating Mode) Ops. tested -553 for the APS test via the "Block & Block" mishtod to the APS for pressure switch PCL-0558 on discharge of P-553 & APS for P-555A L/O pump which standed P-553 on APS as seated with normal discharge pressure ®

https://impacterm.chevron.com/IMPACT/ANYWHERE/Reports/exports/scenario_159134_f8a5390b-1e90-4874-b012-4d17412a3a40.htm 8/9/2012

	1	1			_	
	39928	39926	39919	39914	39909	39909
	Richmond, CA - Refinery	Richmond,	Richmond, CA.	Richmond, CA - Refinery	Richmond, CA - Relinery	CA - Refinery
	, 6/19/2012 8:00:00 AM	, 6419/2012 6:50:00	B/45/2012	8/19/2012 12:00:00 AM	. 6/19/2012 12:00:00 AM	12:00:00 AM
•	Closed	Closed	Closed	Closed	Closed	Closed
	Loss	[ 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	08	Near	Near Loss	Naar
Replacement for 39587 which was deleted: Green	fechnidan using a frayed extension cord.	Small Oil Spill	Coment Pump Truck MVA	list of all Radio system atams not reported since Sept 2011 to present	Radio 8 went into alarm	Radio 8 want into atam
Addressing Alternate Fall Protection Plans. Location: Long Wharf Berths #2, 3 & 9 Green Card. While performing a WIP CHESM Audit with the CSF team, noticed the verbal direction of which fall protection was to be utilized in a specific area. Was not specifically addressed in either the Atlemate Fall Protection plan or the completed CVX JHA. A question exists as to whether or	Technician plugged in an extension cord, the extension cord was old and frayed. When plugged in he could produce a spark 5 Why What-defective cord being used Why(1) only cord in darkroom at the time Why(2)-never notified expended cord vasa bad Why(3)-baccuse it was still in working condition Factor; Previously used cord with no regative consequence	Our crew was working to get ready to damo about a 15' section of the #2 fuel oil suck-out line. The main 12' header had been drained down with a vacuum thick and the remaining product was to be sucked out of the 3' line. White line dray was refoculing with the vacuum hose the line burged and a small amount of oil escaped and landed beyond the containment pool and entered the water.	A Control Pump truck was being ascorted to tank 634. The truck was onsite to pump cernent for new pipe supports. They excented the pump truck thrust lower Ethyl Road. As the Pump truck driver approached the pump will be "inched" the truck knower in an attempt to clear the playeway. In doing so one of the playes was nicked with his beam and the whiche was immediately stopped. The damage experient to be a started of .000 or less impediately stopped. The damage experient to be a started of .000 or less impediately esto of the pump truck was then rebased so that the line and determined it to be satisfactory. The air from the time of the pump truck was then rebased so that the line and when the satisfactory without any further incident.	8-23-179-13-201 19-24-201110-18-2011 110-20. 201111-18-201112-9-20112-23-20124-10-2012. Alaims attended to and repaired but not felt by the customers.	Radio transmitter malfunction alarm.	Radio transmitter melfunction elerm.
:	NL-Injuryillness - Contractor Injury	Environmental	Transportation	NL-Operational Process/Procedures - Safety Systems	NL-Operational Process/Procedures - Safely Systems	NL-Business Process - Business Process
		(1) "FIVE WAY" One Page Repot Incident Number #38926 Business Unit Biending & Shipping Location What Fedility Name Incident date 6/15/12 Type of Frocass: Type of Couprient: Team Members: Ron Britovich, Mickey Thompson, Namy Banulois Maghan Horton, Earl Young, Steve Hammack, Incident Description: What: Small amount of cily water lasked into the bay Whore (Iocation or where in the process) What When: 6/18/12 – approx, 8/25 a.m. How: Line busped out of one of the open ends Froblem Statement (What is the key Issue hat needs to be addressed?) Cell selected into the bay. FIVE WAY'S 1, Why dit "above" happen? Verification Line burned past containment, 2. Why did "a happen? Following procedum to drain suckout line. 4. Why did "a happen? Pulled silnger to drain enother portion of line. Why did "a happen? RODIT CAUSE; What was the Root Cause of Your Incident? Lack of skillor knowledge. 2-Person was trained, but did not fully understand skill or knowledge. (Instruction needs impowement, practice or reposition	(1) "FIVE WAY" One Page Report Incident Number #38919 Business Unit Blanding & Shipping Localion Mikway & Ellhyl Road Facility Name incident date of 19/12 Type of Process; Type of Equipment: Team Members: Ron Bikwokor, Mike Marin, Shall Cutl, My herson Incident Description: What & Sub contractor pump truck busined against a section of pipe in the pipe rack. Where (localion or where in the process): Notway & Elmyl Road When: Tuesday June 19, 2012 How. When the sump truck cities repproached the overhead pipe rack he attempted to inch his way under the pipes and pipe rack he attempted to inch his way under the pipes and pipe rack he attempted to inch his way under the pipes and pipe rack he attempted to inch his way under the pipes and pipe rack he attempted to inch his way under the pipes and pipe rack he attempted to inch his way under the pipes and pipe rack he attempted to inch his way under the pipes and pipe rack he attempted to inch his way under the pipes and pipe rack he attempted to inch his register of the key issue that needs to be eddressed?). Proper communication and pre-planning of the preferred route. In the page of the preferred route of travels. 2. Why did "1 happen? Contractor has been working in the aces for over 1 week and in the refinery for 16 years. 3. Why did "2" happen? Escort ween and awong of the preferred route. 4. Why did "3" happen? In the past he has used the route on Elhyl St. Whith other comment and pump rucks without incident? In the past, bid not follow procedures or acceptable practices and no incident on courred. Contributing Fectors: Warning devices and signage were NOT in piace at the time of this incident. Sind works authority was not exercised prior to the nocident by the driver. Escort learn did not recognize the hears and second soft with the low pipe wayLack of communication on the height of the pump furck.			

	40021	40013	40011	40000	36982	J <u>e</u> 979	35948	39945	39929
Richmond,	Richmond, CA- Refinery	Richmond CA - Refinery	Richmond, CA - H 1 Refinery	00 Refinary	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - 48 Refinery	Richmond, CA - 45 Refinery	
, 8/20/2012 2:00:00	I, 6/20/2012 2:00:00 PM	10:30:00 AM			5/22/2012 10:30:00 AM	, 6/20/2012 4:55:00 AM	6/19/2012 2:00:00 PM	1:00:00 PM	CA - 1:00:00 Refinery PM
	Closed	Clased	Clesad	Chased	Closed	Closed	Closed	Clased	Closed
<b>∠</b> 80,	Loss Near	C N	Loss Near	Near	Near Loss	Loss Loss	Near	Loss	Loss
Lost communication during	Lost communication during equipment isolation	Contract EE reported pain and swelling of left cheek.	Operator Dizzy	FCC totalyzer Iroped when K-1950 this down on high level, be visible flanfrig occured.	GreenCard: Plastic LOTO lubes need replacing	Green Cerd - The boiler shop / machine shop parking lot gate broken and creeking a safety hazard.	Bridge #201 graving panel fell off of supports after a Truck passed over it	Iruck towing T.O. lost traction went off road, moved #12 mogas line	
outing the kinding process of #5 boiler in preparellon for entry, a bind was not installed prior to removing a blowdown valve on the boiler to completely drain it. This kind is loqued on a common blowdown header mail is fied to all other boilers. During the same time, #4 boiler was in the process of being shutdown per procedure and the use of the blowdown valve (normally closed) was necessary to brain dram level. As ops slowly opened 50% valve on 4 bit, steam blowing to almosphere was immediately head of op closed valve immediately, blowdown H2D is elasm blow thru an open 1* pipe at grade level immediately, blowdown H2D is elasm blow thru an open 1* pipe at grade level immediately.	During the thinding process of \$5 boiler in preparation for entry, a bird was not installed priet to removing a blowdown valve on the boiler to completely drief. It. This bind is located on a common blowdown header had it send to all other boilers. During the same time, \$4 boilers was in the process of being shutdown per procedure and the use of the blowdown valve (normally closed) was necessary to lower drum level. As ops stowly opened B/D valve on 4 bir, steam blowing to etmosphere was immediately. Blowdown H2D to sham blow thru an open 11 pipe at grade level timediately. Blowdown H2D to sham blow thru an open 11 pipe at grade level coming in carlest with nothing.	Contract EE reported pain and swelling of left cheek to Chevron Maintenance Supervisor.	An operator was working in room #1121 GC when he fet dizzy after running a Reprina Sour Sample (D&R) for D-2887.	FCC lotalyzar (rippad when K-1960 shul down on high level.	Pinsho tubes (LOTO) continually falling spart from sun & bad weather. Paper work gets water soaked or lost because protective tube is no good.	in the boiler shop / machine shop parking lot the pass gate is non-functional One arm was removed but this creates a hazard as both travel pathways so through the same side.	A grading penel on Bridge #201 fell off of supports immediately after a Truck passed over the bridge. No injuries or damage to truck occurred. Trace fucks were unable to leave the area as it was a dead end mad with no safe way to exit area until the next day when the Bridge was repaired.	A Contractor EE Truck lowing a Thomas Oxidizer on SP hill road near old Tank 1666 pad lost traction gring up the hill and skidded downhill ~ 15 feet before coming to a stop next to the pipe line off the road.	Fall Projection Plans, Long Track area, and whether or not that area should be considered "over water".  What
NL-injuyillness -	NL-Injury/illness - Employes knjury	NL-injury/liness - Contrador injury	NL-injery/iliness - Employee injury	AllRegulatory Compliance - Permit Exceedance	NL-Lessons Learned	NL-Transportation - Company	Nt. Equipment/Property Demage - Equipment Demage	Transportation	NL-Lessons Learned
(1) No established procedure to ensure isolation is parformed	(1) No established procedure to ensure isolation is performed procedure.			(1) K. 1960 was not operating properly causing the discharge of its stepe To be inadequate to love town of in V. 1962. TFVE WHY? One Page Report Incident Number 40000 Business Unit hydro Location RL OP Facility Name K-1960 Incident date 6-20-2012 Type of Process: Relief gas Type of Equipment. Flare Gass Recovery compressor fleam Members: Incident Description, WhatFCC Loubiz Facility Plane R-1960 And down on high level. 6-20-2012 07:09 How. 1960 And down on high level. 6-20-2012 07:09 How. Operations were ottempting to tabilize cuclinn flow to K-1960. Once line was un-plugged caused liquid to be knocked out on V-1962. Due to the fact K-1960 is is stage discharge pressure was inadequate, him on was not enough pressure to provide the season of the fact K-1960 is is stage discharge pressure on the first K-1960 into down on high level. Poolem Statemart (What is the Key Issue that needs to be acclassed?): Inadequate it is asped discharge pressure, However this was causing the relief system to be overloaded due the the availability of only one FCR machine. 2. Why did "1-happen/FC was required to be oppined to suction of K-1960 owns for Brachine 2. Why did "2-happen/FC required due to 1st stage discharge pressure on Just Section 1st stage discharge pressure of NAUSE: What I was the Roox Cause of your Incidentify K-1960 was not operating treperly causing the discharge pressure of the stage to be nadequate it.			(1) No Inspecton Program, (2) Design less than adequate	(1) Loose Gravel on Read. Equipment Selection.	

		40342	40336	40317	40232	40231	40124	40026	40021	40021
•		Richmond CA - Refinery	Richmond CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA -	Richmond, CA -	Richmond, CA - Refinery	Richmond, CA Refinery	40021 Refinery
•		. 6/25/2012 8:00:00	621/2012 1:00:00 PM	, 6/19/2012 7:00:00 AM	, 0/23/2012 11:00:00 AM	6/24/2012 12:40:00	6/21/2012 5:00:00	1:30:00 PM	6/20/2012 2:00:00 PM	R
		Closed	Closed	Сюзас	Closed	Closed	Closed	Closed	Cosed	Closed
•	<del></del>	Loss	Loss	Negr Loss	Loss Loss	Loss	Loss	Near Loss	Loss	- SS
•		Cracked windshield on Carry Deck Crane	18 plant shutdown due to seal teaks on both P- 1831/A pumps.	Green Card. Need a blind bin to prevent blinds from falling. Location: RLOP 14 Plant, E-1413 Fin Fans	Operator had discomfort on lip. Seen by Martinez clinic & refeased. Non Industrial	Flare gas compressor k- 1060 shuldown and wooldn't restart K-1070 woold not start	Conrector transport truck was leaving refinery with K-920 Rotor near full and Channel Sirett when the load shifted. The rotor fell appoximately 8 inches to the bed and damage assesment is under until the bed and damage assesment is under until a furthor inspection is performed by Kontler. Appears to be minor damage. No personnell injuries occurred.	Irratation to nack/face	Lost communication during	Loss equipment isolation
_		Mechanics were moving a new motor for P-1453A that was attached to a paliet with the Drott. While moving the motor and paliet onto the Drott, the paliet stowy rotated and came into contact with the windshield of the Drott cracking the the lower comer of the windshield.	We tost P-1831A due to a seal leak on day thin, June 21st. The other pump, P-1831, was not evaliable because it was sill out of saryince swalling maintenance to fix its seal leak. 18 plant was shufdown and sour water washed write P-1831A was being repeired. This is a Level 3A event because it is a repeat clock respoil of an similar event that occurred in Feb 2012 (within past 12 months—refer to LI #31749).	Green Card. Up on the south calwalk of E-1413 Fin Fans, observed that 2* 20to blinds are thanging of the handrals. Could be clipped or knocked off to the ground below causing serious injury or damage. Location: RLOP 14 Plant E-1413 Fin Fans	Operator noticed discermint on lower lip. Teported to HD/STL the following day. Seen By Martinez clinic, classified as non-industrial.	All 12:45 in the Flare gast recovery srea. The FGR shuldown crew was altempting to switch from K-1660 to K-1070 in order to replace K-1060 suction block valve. K-1070 would not stert so operations began to troubleshood the fassue. The HO notificed K-1060 was on suction pressure shuldown bypass and suggested, because of the new control panels and system, that the issue with K-1070 might be that K-1060 was in Bypass Suction pressure on the temporary Suction Knockout vessel V-1050 by was holding a normal 8 pal. The HO instructed the CBO to take K-1050 out of shuldown bypass at which time K-1050 shuldown and also could not be restarded. Further investigation indicates the two Pressure indicators on the paramenent V-1050 GBP 11750A and B wylich are et zero PSI are still in the Shuldown logic and need to be removed prior to taking the FGR Compressors out of low suction pressure bypass.	Contractor transport truck was feaving refinery with K-920 Reter near Mill and Chennel Strett when the load shifted. The roter fell appoximately 8 inches to the bod and initial damage assessment is unchast rupid a further inspection is performed by Kottler. Appears to be minor damage. No personnell ejuries occured:	Installing conduit for the Homeland Security Enhancement Project. Poison in eres. Employee felt slinging sensation around fece and nock.	During the thirding process of #5 boller in proparetion for entry, a blind was not installed prior to removing a blowdown valve on the boller to completely drain it. This blind is located on a common blowdown header that is field to all other bollers. During the same time, #4 boiler was in the process of being shudown per procedure and the use of the blowdown valve (normally closed) was recessary to lower drain level. As ops slowly opened \$1D valve on 4 bit, sfeam blowding to atmosphere was immediately head and op closed valve immediately. Blowdown 120 / steam blow thru an opon 1" pipe at grade level coming in contact with nothing.	
-	NL.	Equipmen <i>UFrope</i> rty Damage	Equipment/Property Damage	NL-injury/iliness - Employee injury	NL-injury/liness - Employes injury	Regulatory Compliance	Equipmen(Property Damege	NL-injury/iliness - Contractor injury	NL-Operational Process/Procedures - Safely Systems	Contractor Injury
	(1) Why did the salely of V-735 continue to lift for over 5 hours. Because the pressure on V-735 was above the designed set pressure of the PSV. Why was the pressure of V-735 too high. Because the plant was in the process of pulling feed and not all the moves to lower the pressure on V-735 were made. Why were not all the evaluable move made to lower the pressure on V-735 were made. They were not all the evaluable move made to lower the pressure of V-735. Because the crew did not have	(3) Incident Description: Mechanics were moving a new motor for P-463A that was attached to a patier with the Droft. While moving the mater and patiet conto the Droft, the patiet slowly material and earne into contact with the windshield of the Droft cracking the fower corner of the windshield, FIVE VMYS 1. Why did "above "happen? Verification Mechanic moved motor with patiet statened 2. Why did "1 happen? Mechanic had done this text before with no iscues 3. Why did "2" happen? Mechanic patid doser attention to load when it was on the hook.	(1) Repeat event of a February 2012 event investigated under Lt #32286, where solutions are pending. Refer to notes in the Journal and Lt #32285.			(1) The shuldown coordinator assumed the Pis were removed from the shuldown logic as part of the project and did not recognize the risk., (2) The CST do not remanuter that the K-1050 and K-1070 required ALL shuldown bypasses to be in normal to start a compressor. Factor B-in the past, did not follow procedures or acceptable practices and no incident occurred., (3) Although the HO did not activate the bypasse safety since the parent is outside, the HO did not noted the safety bypass in the tumovers which would have notified the HO on the next shift to fill out a bypass safety form when the one-shift limit for safety bypass was reached.	(1) Cribbing in bad shape, (2) Conducted stand down to go! commitment to take the lime to do the right task the right way every lime		(1) No established procedure to ensure isolation is performed propertey.	propariey.

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	Richmond, CA Refinery	Richmond. CA - Refinery		Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA -	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA : Refinery	Richmond, CA - Refinery	Richmond, CA · Refinery
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	Naar Naar	Loge	Loss	COS:	Loss	Loss	Loss	Near Loss	Near Loss	Loss	Near Near
	2011 CalARP Audii Finding #284	Green Card. Yellow poles in the area are too short. Location: SISO - 20 Plant	Contractor work van came In contact with yellow poles	WorkPace Satings Modified without user's knowledge	Picker contacted pipe support and thermo well gauge	CORISO #552 went coreidue (due 5/19) – WO 330783	Arm of cheir enapped off white attempting to stand from silling position.	Green Card. No crane taps white doing rigging. Location: S. Isomex	Groen Card. Traffic signs fell over in walkway. Localion: North Yard #1 Parking Lot	Green Card. Retainer pin is sticking out. Location: D&R F-1160 Burner #5	IX-7311, V-735 safety
In the RDC south tot near bay number S, the injured worker was spoiling for a pickup truck that he was directing backwards to Ntch up to a compressor trailer. Worker alopped truck and bent down to manuaver the trailer tongue so	CalARP Audit recommendation #384, Chevron committed to utiliza FireRMS data management system to belier track and manage fire compilance data and inspecifions, liem #384 has a due date of £80,2012. Due to medical lesues at 201 industries, the firm providing the data management system, the formalized training and system implementation is not complete. Zolf's best guess as to when they could possibly provide the necessary training was to be the end of fund.	Geond Card. While working on 20 Plant, we noticed the yellow poles in the area when the short. Someone can drive ever them and have a MVA. Location: SISO 20 Plant		Employee had their work pace computer settings modified without their knowledge. Once settings were modified, settings became locked not allowing the user to reset their settings were modified, setting the term to despire setting that their forms to despire setting that they were secribing for until the workpace break had finished.	EE was esting up Dicker to help mechanic install acque pot Front ouriggers were bowered first. EE then revied up the engine to lower the back outliggers not realizing that be transmission was still in gear causing the picker to jump floward and contacting the pice support with the digit front outligger. The pipe support is about 12 of the ground and broke free from its another back. Front outligger also made contact with thermo well gauge causing it to break.	Initial maintenance (clean off studs) work steried for this CORISO requirment in July of 2011, however it was not completed on time.	While attempting to stand from a siting position the right arm of the chair completely anapped off causing the employees arm to jerk downwards.	Green Card At Flara Recovery Unit, doing crane litting pickup and they don't have crane tape, white they are doing rigging. Wide open for people to walk fight under the figging.	Green Card Traffic eigns fell ever in walkway, could cause falls, Location: North Yard #1 Parking Lot	Green Card White working on a burner, air register handle, I noticed the retainer pin is slicking out. Location: D&R F-160 Burner #6	The safety on V-735 started litting at about 22:00 on 6/25/12. It will seek for a few seconds and the lift again.
	NL-Regulatory Compliance - Non	NL-Transportation - Company	Transportation	NL-Lessons Learned	Equipme <i>atPrope</i> rty Damage	NLRegulatory Compliance - Non	NL-injuryillinass - Employee Injury	NL-Injuryilliness - Contrador Injury	Nt-Lessons Learned	NL-injuryilliness - Employee injury	Equipment/Property Demage • Equipment Demage
			(1) Driver misjudged how close he was to edge of pavement, (2) Driver went to hit brate and feel styped and hit line gas.	(1) Incident Number 40522 Business Unit HES/Fitness/Ergo Location Feedity Nume Incident date 6/25/12 Type of Process: Type of Equipment: Team Members: Allison Beane Robin Jehm's Incident Description: Employee had thair work pace computer selfings modified without heir runwivelege. Once settings were modified without heir runwivelege. Once settings were modified, selfings become locked not allowing the user to reset their settings. Causing that individual to disrupt a meeting that they were scribing for until the workpace break had finished, FIVE WHY'S 1. Why did "boyeo" happen? Admin had lack of knowledge of module function 2. Why did 1"1 happen? Selfing changes 24 hour delay not part of the teahing program 3. Why did 2" happen? Corporate approved online training program offered 2 years previous did no contain his position	(1) Drivor misudged how close he was to edge of payament, (2) Did not follow preper safely practices and lake the transmission out gear	(1) Problem: CORISO 4853 went overdue (due 5/16) - WO 330783 1. Why? - There was a delay on meitlenance planning for additional work scope after the job had civil engineering completed i. Not a fluid process for handing off work that sither needs engineering or engineering is done and is ready for maintenance – especially when multiple scope changes are involved, (2) Problem: CORISO 4652 went overdue (due 5/18) - WO 330783 2. Why? - Execution was delayed and to getting inspector tree – old not how there was a 3 day cure time for anchor boils a. Lack of knowledge in maintenance plending and execution with the process involved with permitting work.					the knowledge about these moves. Why did the crew not know about these moves. Because they tacked the experience and or did not receive the proper training.

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6/28/2012 9:46:00	6/26/2012 10:45:00 AM	8/26/2012 1:00:00 PM	8/26/2012 8:00:00 AM	6/25/2012 8:30:00 AM	2:30:00 PM	6/25/2012 9:00:00 AM	9/21/2012 3:00:00 PM	6/21/2012 7:00:00 AM	6/21/2012 7:00:00 AM	5/20/2012 9:00:00 AM	6/20/2012 10:00:00 AM	8/19/2012 2:30:00 РМ	6/26/2012 10:00:00 AM	6/24/2012 12:00:00 PM	6/27/2012 7:45:00 AM
	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
Noar	Near Loss	Near	Near	Near Loss	Near Loss	Loss	Noar Loss	Lose Lose	Near Loss	Near Loss	Loss	Loss Vess	Near	Near	Loss
Green Card. Worker was backing his truck up without a spotter. Location:	Green Card. Evac system in D&R West was down. Location: D&R West	Green Card, Found a box in the road, Location: 19Plant, Isomex St.	Green Card, Observed vehicle driver backing up and almost hitling a post, Localion: RIOP Control . Room, Northside parking spaces	Green Card, Contractor with no gloves, Location: RLOP 19Plant, 1950A Fin	Green Card, Repair bar guard on ladder, Location; Power House, 3rd deck between Boilers 5 & 6	Green Card, Leaking pipe. Location: #5 Power House, #5 Boiler		Green Card. Overhead sleam (eak. Location: D&R 4 Crude Unit, MP-1178	Green Card. Dip in the pavement. Location: Plant 15 under F-1410	Green Card. Overhead steam teak. Location: D&R 4 Crude MP-1179	Green Card, No green tag r on scaffold, Location: H2B Plant, Northside of F-355A	Green Card. Found a leak on a greenway vaive. Location: RLOP - Butane sample station 19Plant	Green Card. Need a stop sign installed. Location: Intersection of Chavron Way & Center St.	While in the pocess of approving an FCC Import feed tank transfer a discrepancy in the maximum allowable colloide content was a discovered.	Worker injured (first aid case only) his leg when it was pinched beween a compressor and a truck sumper.
Green Card. A worker was backing his truck up without a spotter, Location: #8	Green Card. Evac system in DAR Ybast was down. Operator Informed Acig.   weat to Investigate, Noticed water in evac header at P-3592. Drained line. System was still low, Locaton: D&R Ybast Evac System	Green Cerd. While driving in RLOP, I found a box in the road. The box was still (speed up, Location: 19Plant, Isomax St.	Green Card, Observed a vehicle driver backing up and coming within a few feet of hilling a stationary post, Location: RLOP Control Room, Northside of parking spaces	Green Card. Noticed a contractor going down a ladder with no gloves. Location: RLCP 10Ptent, 1950A Fin Fan		Green Card, I was cleaning around #5 Boller and noticed that there was a drip coming down from a pipe. I slopped and asked operations what was coming out of pipe and he said it was just water. Location: #5 Power House, #5 Boller	Green Cerd. Seen a teak by F-330, Northeast side of the furnace. Location: S. Isomax, F-330	Green Card. Overhead steam leak by MP-1178 on 4 Crude, I noticed it white welking to our job site. Location: DSR 4 Crude Unit, MP-1176	Green Card. I noticed a dip in the payement big enough to roll the ankle of an innoemt passerby. Location: Plant 15 under F-1410	Green Card. Ifound MP-1179 has an overhead steam leak. Location: D&R 4 Cruds MP-1179	Green Card. Observed inst, techs about to ascend an unapproved scaffold (no green flag). Reminded the mechanics that the scaffold has not been tagged for work. Location: HZB Plant, Northstife of F-355A.	Green Card, Found a leak on a greenway yalve, The valves stem collar had a stripped hex nut making it unattainable, Location; RLOP - Butane sample station 19Plant	Green Card. At the storementloned intersection, the cars coming from the Main Gate do not have a stop Algorithm could set to early care soming from the Admin Bidg crossing over to Center St. are not expecting the cars coming from the Main Gate to go through the intersection without stopping, Location; intersection of Chorvon, Way and Center St.	While in the process of approving an FCC import feed tank transfer a discregatory in the maximum allowable chloride content was discovered between the Startins system maximum and the R1-703 maximum. The Startins indicates a maximum of 5ppm and the R1 indicates a maximum of 5ppm.	a Hitch-up could occur. The invick's rear hitch was about 2-3 feel from the longue of the Italier at this point. As the worker was manually maneuvering the compressor the pickup linds audiderly moved backwards. The worker had stepped believen the compressor fongue and the fuck bumper. The log right above the knee was princised between the longue and the fuck's rear bumper. Above the knee was princised between the longue and the fuck's rear bumper. Worker yelded to the ordiver and driver pulled forward releasing the log. Worker had mild path and UST Seriety and Plant Protection were called.
NL-Transportation -	NL-Lessons Leamed	NL-Lessons Learned	NL-Transportation -	NL-injury/iliness - Confractor injury	NL-injuryiliness - Contractor injury	NL-injury/Ikaess - Contractor injury	NL-Environmental - Operational Leak	NL-Environmental - Operational Leak	Employee Injury NL-injury/iliness -	NL-Environmental - Operational Leak	NL-Injuy/Illness - Contractor Injury	NL-Environmenta) - Operational Leak	NL-Transportation - Company	NL-Business Process	์ โก _ป นกรู/ให้กอรร
														(1) Request to make change in StartIms was made by PED. Correction of the chloride limit had not yet been completed. STL and On shift crew were a were of correct chloride limit and correctly followed RI-703	(1) Worker put his leg in a pinch point

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	C S R	Near Near	Coss	Near	5035
	Marcury thermiometer on Auto VIS broken	Cal ARP finding #364 - Overdue, \$/29/2012, updels RI-395 to include changes to FRMS under normal operating conditions.	V-1441 Relief Bypass Valve Leak By Resulting in Alky SID	Backhos end hand probing in the precess of tracing a 12 inch pipe. About a foot down an unchanted 1.5" fresh water fine was inachentarily touched by the backhos bucket and broke, causing fresh water to flow from it.	#8 Warehouse
Green Card: On the maming of June 17th SDA had a seal fire on P-126A. This plant normally runs with 2 solvent pumps on. Once the fire started it was decided not to put the spare pump on until we knew that the EBV's on the "A" pump held and we would not have to shut down the plant. Running the plant	While putting samples into the Auto VIS machine, Operator noticed that bath #4 was dark and doudy. A mercury thermometer broke in the bath.	Cal ARP finding #364 netutes an action to document our hours of service limits during normal operating conditions. Chevron Falligue Risk Management System (FRNS) for Manufacturing its in the final stages of development implementation and its due to roll out in the facility in 2012. However, RL-36 update has not been posted to the wet, which would satisfy this facility. The Rt will be posted pending Mfg. decision on a facility-wide exception process.	A high relief gas flow was seen in the refinery North Yard relief system immediately following an Alky plant stant up (V-1440 ESP appeirs). The source was determined to be carning from the Alky plant. Operations were able to quickly identify the blank source do be carning from V-1441 PRD relief fine however were not able to determine if the PRD (AL-1422) and/or the bypass valve were fined to be carning from V-14420 and/or to take the unit down as soon as a new replacement PRD could be obtained. The PRD was replaced but operations discovered that the isolated verset was still being pressurface by another gas sources. The bypass valve around the PRD was published and found to be the ourse source of the bypass valve around the PRD was published and found to be the ourse source of the bypass.	While in the process of tracing a 12 inch pipe per contract, tird was disturbed in the vacality of a 1.5" fresh water life, causing water to flow from a previously decayed union. A backnos and hand-pot holing activity was taking place on this job.	Warehouse
	NL- Damage - Equpmont Damage - Equpmont	NL-Regulatory Compliance - Non Compilance	Business Process	NL- Equipmen//Property Damage - General Liability	Contractor
***************************************	(f) Broken themceller, "FIVE WHY" One Page Report Indident Number (40301 business tull Hydro Location Hydro Lab Facility Name Hydro Incident Asia 620/2012 Type of Process Mercury Type of Equipment Auto Ws machine Team Marntares: Indident Description: What: Decarior rollicod broken themcomeller in Auto vis nuclhies. Had plant yellocition to where in Auto vis nuclhies, Had plant protection to where in the process; Hydro Lab Whan: 6/20/2012 1930. How-Holdered discolored oil in balls. Problem Statement (What is the key lissue that I needs to be addreaced): 194 machine bath oil noads dean up FIVE WHY'S 1. Why did "above" happen? Verification Therememotes the hole inded seath 2. Why did "1 happen? Operator number to have broken, 3. Why did "2" happen? Operator under the was broken, 3. Why did "2" happen? All 20 Why did "3" happen? I required samples when he noticed it. 4 Why did "5" happen? I Part of sportery cutters. PROTE CAUSE: What was the Root Cause of your incident? Broken Internoeler.		(1) FNE WHY'S 1. Why did "above" Inappent? The leak occurred to raile is at a maufi of a bypass who faiture. The PRD, Al. 1422, was later opened and Inspected and found to be in phisino condition with no flaws or obtacle. 2. Why did "Inappent? The bypass who faited as a seath of correction." The oppass who faited as a seath of correction tending the investigation team to believe that it is early had been over Eightened at some point causting the valve body seath or card. 3. Why did "2" happent? The correction occurred on the valve as a result of improper material being used in this section of the plant. The vessel tim for V-1441 is AFB pipe class, or Monet urn, all rist valves of or yessels shall be like material or yealer per Chwone Englinearing Islandsros. This bypass of the vessel shall be used to the valve was one of the many flist valves of or one of the many flist valves of or one of the many flist valves of the vessel shall be used to the vessel and it was only AFT with sundard 120° rifus, a downgrade from AFB. 4. Why did "3" happen? It is unclear as to why the original valve tim material was incorrectly specified and installed in the 1955 Akyallian Project for the bypass valve on the relief system. Inadequate tools or anticipate that suther acid would contact this area frequently. ROOT CAUSE(S) What were the Root Causes of your incident? Add more as ended of 1 The incorrect valve tim was specified and found to be in priction condition with no flaws or defects. 2. Why did "1 happen? The bypass valve failure. The FRID, AL-1222, was taker opened and faund found to be in priction condition with no flaws or defects. 2. Why did "1 happen? The seat on the valve was also concledit earing the investigation team to believe that the valve likely had been over lightened as some point causing the valve body seat to crack. 3. Why did "2 happen? The		

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Richmond, 8/23/2012 CA - 12:00:00	7/1/2012 12:00:00 AM	7/1/2012 7:44:00 PM	7/3/2012 5:50:00 PM	6/30/2012 1,00;00 PM	7/3/2012 12:00:00 AM	77272012 7730 00 AM	7/2/2012 12:00:00 AM	7/1/2012 7:30:00 PM			6/17/2012 12:00:00
71 22 22	Closed	Clased	Closed	Clased	Closed	investigation in Progress	Clased	Closed	Closed	Managemen Review	Closed
N e e	LOSS S	Near Loss	L058	F\$\$01	Loss	Loss	Coss	Loss Near	Loss	Loss	Logar
Near New Cyclinder kuba system	Communication Link at Dispatch consete broke, 3 min downtime	Child fell from playground structure	Company vehicle rear ended in City of Richmond	vehids rubbed guids wire when leaving did parking area	Ops lost LOTO key for P- 1102C	Swell of water in work boat	Key is missing for LOTO box on K-3950	Console lasi communication	Channel 4 control channel lost power output	Operator sustained a first aid injury which was verified by Plant Protection during the salling of a ship in berth 4	Green Card: Black Smoke was observed comfrig out of Funaco F-135 during Auto Celibration.
When the new cylinder tabe was installed, there was no connection for the cylinder labe suc pump. There is a connection for the discharge, but it is not it an easy place to get to. There is a connection for the discharge, but it is not it an easy place to get to. There is NO hook yri for the suction of the aux pump. There were no hends on training with the new system. Very few operators from what is going on with the new cylinder labe system. There is no easy way to bleed of the pump or system? If the pump gasses to, The operator is not maintenance would have to break the lines in order to degas the pump. When using the hand pump to degas or fill the system, there is no check valve or block valve to keep from popping the pin on the pump. This would result in the pump not working, Loss of the cylinder luce would result in the loss of that	Communication from the dispetch console to the refinery radios had a short disconnect. Dispetchers could not communicate to the radios and alarming functions down.	A young child fell from the playground zipine structure at the Red and Gun Club. This was entered as a near loss because it was a none work related injury.	Company vehicle involved in an MVC on Easibound Richmond Parkway before San Pabio Avenue. Company vehicle was stopped in traffic and was tour ended by a vehicle attenting to change lanes into the Company vehicle's lane (lane 2) from the #3 lane.	When pulling out of a dirt parking area the safety truck rubbed a telephone guide wire creating a don't on the pickup bod.	Opsiast LOTO key for P-1102C	This maning on 7-2-12, two groupswere sent out to of the boeks. Two men per boet were lesked to sentove the scatfiold squeeze girts, extrana bearns and chinggras) from the Dolphine it Betht #1. The site was essessed and the water was relatively calm. At approximately 0730 the waiter started getting rough, at that point the two men in boat set decided it was time to take the boat. As they made that way around the outer South Dolphin a swell carne over the bow of the boat. The boat that way around the outer South Dolphin a swell carne over the bow of the boat. The boat then solve the started point in the boat with water up to their man ware not lejured, but were stending in the boat with water up to their man ware not lejured, but were stending in the boat with water up to their wrises. The second work boat in the vicinity then came over to rescue the mon in boat. The two mans the started boat of the boat with the started out. The two mans fined aboard a mall amount of debric sols by boat #1 The kno men in boat #2 went back to recover a series amount or debric sols by boat #1 The kno men in boat #2 then headed board boat on the Machine Shop and pulled out the boat.	Operator LOTO key missing for K-3950 LOTO Box.	Console not communicating with incoming radio traffic.	Channal 4 control channel lost power output. Rad o system efficancy reduced. If in arrangency communications slower, but no emergencies happening.	Operator reported he foft a mild twings in his sem when he was lifting a rope off of a double boiland to sail the Macrak Bedrag in Berth 3, and then again 30 minutes wher when he went help sail the Sitrics Voyagar in Berth 4.	with city one pump caused the circutation flow to drop because the back pressure conforting (PC-126) is strated to open. At about 4.56 it was determined mat P-1266. EVB's heat doos on ough that a plant shuddown was not needed. P-1366 were put online, in defing this the selvent flow out of three pumps. Increased and mote load was put on F-135 to manifant of-128 hade thorats. F-135 started to fire up to reach the set point required. Normally this would the no big deal, but at 5.00 a.m. the firmace went this it said calibration for of the day. This loft the beard operator with no indications as to what the furnace were so doing as fer as Oxygen and CO were concerned. This calibration mode last for about 15 minutes. During this time the furnace continued to fire up and put itself in a site of denger. When the auto calibration for all nating in the furnace were & O2 and 91 (up of scale) OC. Moves were made before the auto calibration was complete because plant protection noticed black smake rolling out of the stack of F-135.
NL. Equipmont/Property Damage - Equipment	NL-Business Process - Business Process	NL-Lessons Learned	Transportation	Equipment/Property Damage	Nt-Operational Process/Procedures - Safety Systems	NI-Lessons Learned	NL-Operational Process/Procedures - Safety Systems	NL-Business Process - Business Process	NL-Business Process - Business Process	Injury/tiness	NL-Operational Process/Procedures - Safe operating Limit Soft of the second of the sec
			(†) Information purposes only	(1) Driver parked to class to a utility pole guide wire and was not paying eltention to his surroundings.		(1) No procedures exist or procedures were not followed.	- Printing and a second			(1) Operator strould here got help when needed to protect from galling a 1st ald wrist injury	(1) Why was black smoke emitting from the stack of F-135. Because there was unborned gas lattle furnace. Why was there unbarried gas is the furnace. Because the OZ level in the furnace had dropped so low, not all the fuel gas was burning. Why was the OZ level fow. Because the furnace was firing up and went into calibation. The board operator did not secogize the potential for a furnace bog during the calibation and left the furnaceal in action.

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	41137	41114	41114	41100	41085	41080	41080	41079	41079
	Richmond, CA - 41137 Refinery	Richmond CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond CA - Refinery	Richmond CA .	Richmond, CA ·	Richmond, CA - Refinery	41079 Refinery
	7/6/2012 9:00:00	7/5/2012 12:00:00 AM	7/5/2012 12:00:00 AM	7/5/2012 2:00:00 PM	7/1/2012 12:90:00 AM	4/10/2012 12:00:00 AM	4/10/2012 12:00:00	5/23/2012 12:00:00	À.
	Ciosed	Closed	Closed	Investigation In Progress	investigation in Progress	Fact Gathering	Fact Gathering	Fact	Gathering
	L N	Loss	Near	Coss Near	Loss	L N	Cost Ness	C Z	158
	Labei on Haz Waste drum	Viscosity bath heater for SDA tar sample, tripping breaker	Viscosity batt heater for SDA tar sample, tripping breaker	High vibration on P-36 at 17 PS has caused damge to its support sincture	Overdue CAP Tasks	Loss of Recycle Coimpressor Emergency Procedure may not cover all hydroprocessing Best Practices.	Loss of Recycle Coimpressor Emergency Procedure may not cover all hydroprocessing Best Practices.	New Cyclinder lube system X-910/20	Loss K-910/20
	white walking next to the 13/18 PLT reactor exchangers, I noticed that the grean tag on a 55 salton haz waste drum was not tilled out. There is no indication on the green haz waste tag of what is in the barrei. One of the bung holes is misting, and the barrel fid is not secured. There looks to be way, oil in plastic bags inside.	Manual Viscosily bath for SDA tar semple keeps tripping breaker in new lab.	Manual Vicosily bath for SDA tar sample keeps ripping breaker in new lab.	INITIAL DESCRIPTION: SEE LINK ATTACHED IN INVESTIGATION FOR COMPLETE TOP REPORT. Concrete loundstions for P-36 support legs on the statiner K-38 are partially damaged, and the deadleg support is 3/4 of the way off center.	Sk (6) CAP Tasks due between June 28th and 30th by ESD personnel were not signed off as complete.	Loss of Roycle Colimpressor Emergency Procedure may not be signed with all Hydroprocessing Bost Practices. Emergency procedure states to depressure until ITs are stable and not increasing. However, Hydroprocessing BNI leaders emphasize that IT readings are unreliable when there is minimal flow through the reaction. Also, the emergency procedure states that it he accycle compressor is not restanted within 5 minutes; refer to a different emergency procedure (temporative excursion EP), but in the time it takes to pull up that emergency procedure (temporative excursion EP), but in the time it takes to pull up that emergency procedure there already could be a temporature excursion.	Loss of Recycle Colinposesor Emergency Procedure may not be asspeed with all Hydroprocassing Best Practices. Emergency procedure states to depressure until Its are stable and not increasing. However, Hydroprocessing BiN1 flagdens emphasize that IT readings are unreliable when there is minimal flow through the reaction. Also, the emergency procedure states that if the recycle completed is not resided within 5 minutes, refer to a different emergency procedure (temperature excursion EP), but in the time it takes to pull up that emergency procedure there already could be a temperature excursion.	When the new cylinder tube was installed, there was no connection for the cylinder tube aux pump. There is a connection for the discharge, but it is not in an easy place to get to. There is NO hook up for the suction of the aux pump, there are no hards on training with the new system. Very few operators know whall is going on with the new cylinder habe system. There is no easy way to been of the pump or system if the pump gasses up. The parenter or maintenance would have to break the lines in order to degas the pump. When using the hand pump to degas or fill the system, there is no check valve or using the hand pump to degas or fill the system, there is no check valve or block valve to keep from popping the pin on the pump. This would result in the loss of that burster compressor, loss of the cylinder tube would result in the loss of that booster compressor.	
	NL-Leavons Learned	NL-Business Process - Business Interruption	NL-Quality - Quality MS-Preventive Action Request Log (PAR)	NL- Equipment/Property Damege - Equipment Damege	NL. Business Process - Business Process	NL-Operational Process/Procedures - Safe Operating Limit (SOL) Excepted	NL. Equipment/Property Damage - Equipment Damage	NL-Operational ProcossiProceduras Plant Run Out/Slow Down	Damage
(1) Drum should have been labeled properly and removed once no larger needed "FivE WAY" One Page Report indden Number 41137 basiness Unit lydro Location NuF Fazelity Neme RLOP Incident date 7-6-2012 Type of Process: Hazardous Wester Type of Evipment: Drum Tream Members: Incident Description: What Operator noticed 55 gat drum was improperly labeled. Writte (Iccation or where in the	(1) Drum should have been labeled properly and removed once no larger needed "FRU WHY" One Popa Rogen Incident Number 41137 Business Unit Hydro Location HNF Facatiny Name at ALD Plindent lates 7-6-2012 Type of Process: Hazandous Waste Type of Equipment Drum Tram Members: Incident Description: What Dosardor noticed 55 gal drum was improperly abased. Waste (Dosardor noticed 55 gal drum was improperly abased. Waste (Dosardor noticed 65 gal drum was improperly abased. Waste (Dosardor noticed fine improper label. Froblem Statement (What Is the key Issue that needs to be addressed?); Drum not removed from plant once not needed arymore. FIFE, WHY 51, Nyy did "above" improper label. Problem Statement (What Is the key Issue that needs to be addressed?); Drum not removed once to determine due to fact no accumulation delto or identifiate contents. 3. Why did "2" happen? Unable to determine threetore operations had drum removed the based of the contents. 3. Why did "2" happen? Unable to determine threetore operations had drum removed the based of the contents. 3. Why did "2" happen? Unable to determine threetore operations had drum removed properly and removed once no banger needed.		<ol> <li>Why is the Manuel Visc bath overloading power supply?</li> <li>Awailing electricians load check of the power supply to vant hood with Manual Visc bath.</li> </ol>		(1) CFD CAP Tasks are listed under "HES General" Instead of CFD. As such, when reviewing upcomming tasks, none were found.	·			

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	41295	41213	41212	41205	41205	41204	41171	41137
	Richmond, CA Refinery	Richmond, CA - Refinery	Richmend, GA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond CA - Refereny	Richmond, CA - Referency	Richmond, CA -
	7/10/2012 7:30:00 AM	7/9/2012 1:30:00 AM	716/2012 10:00:00	7/9/2012 8:00:00 AM	7/9/2012 8:00:00 AM	7/3/2012 12:00:00 AM	7/8/2012 9:45:00 PM	7/8/2012 9:00:00
	Closed	investigation in Progress	Closed	Closed	Closed	Closed	investigation in Progress	Closed
	Near	Loss	Loss	Loss Loss	Near Loss	Near Loss	Loss	Near Near
3 STOP WORK pauses during a Naco Chload. Naco delivery truck came into off-Load Netzo Product EC2/12/2/(An envisiter) for the Crude Unit into Naco #18/86 Enrik. Upon armyal @14:00, Natice driver was setting up to on-load and had issues with its air compressor to start the Natice's criwer Vwildon pump to progress the off- load. After shift exchange, nightshint DAR East-Sidde craw came out & noticed a Non-Approved Ground Samp boring used, FiRST Stop Work Authority was used by Opa, to find an Approved Ground	Sing taspection to the garage was not up-to-date	K-920 Trabon kibicator lost flow	P-1666 / currently rock cause is undetermined as to whether this fallure was field or shop related so this til has been entered to track and subsuquently share the determined cause of hatsilation and subsequent start up feiture.	Green Card. Replace lights in women's showers. Location: Rod&Gun Outdoor Viormen's Locker Rooms	Green Card. Replace lights in women's showers. Location: Rod&Gun Outdoer V/omen's Locker Rooms	Green Card. Remove chains to open up parking. Location: West of Gate 91	V-712 PRD, IX-7141, chattering due to two false pressure indications	Label on Hez Waste drum blank
·	Slings were found hanging in the garage that were old and should have been taken out of service	k. 420 Trabon lubicator lost flow and alarmed. Operators found oring disturbed ond rupture disk burst.	P-1665 / currenlly root cause is undetermined as to whether this failure was field or shop retailed so this t. I has been entered to track and subsuquently share the determined cause of installation and subsequent start up failure.	Green Card. The lights over the women's showers in the autida locker room have been out for a few months. It is a safely issue because you can't see in the shower very well, it is allower, and those are sleps to got into a low of the shower very well, it is allower. When the shower well is the shower when the shower well is allower when the shower shows the shower when the shower is a locker Rooms.	Green Caid. The lights over the women's showers in the outside tocker room here been out for a few months. It is a safety issue because you can't see in the shower very well, it's slippery, and these are steps to get into a few of the shewers, Location: Rod&Gun Outdoor Wemen's Locker Rooms	Green Card. Parking lot West of 91 Gats needs to have all chains removed to open up parking to prevent vehicle accidents. Also need lights a cortain time of year. Location: Vest of Gate 91	IX.7141, one of two PRD's on V-712 was chattering. This was causing increased flow to Flare Gas Recovery.	While walking next to the 13/16 PLT reactor exchangers, I noticed that the creen tag on a 55 galton haz waste drum was not filled out. There is no indication on the green haz weake tag of what is in the berrel. One of the bung notes is massing, and the barrel lid is not secured. There tooks to be waxy of in plastic bags inside.
	NL-Lessons Learnad	NL- EquipmentProperty Damage • Equipment Demege	Equipment/Property	NL-injury/iliness - Employee hjury	NL-Lessons Learned	NL-Transportation - Contractor	Operational Process/Procedures	NI. Regulatory Compliance - Non
			(1) What happened. Coupling and soal area stated to throw out sparks during un-in. 1) Why did this suspen? Seel gland came in contact with reaking shall. 2) Why did the gland contact the shalf? Gland was installed with accessive register clearance and improperly eliginad. 3) Why was the gland installed this way? In order to expedite the repair and minimize repair spend due to a future upgrade plan. Also a discussion was need between shop and field machanics and we all agreed that this method was OK to do. So the Root Cause was the decision to install the gland with bad registers. As mentioned we believed this repar type would be sufficient to get to the equipment to a date in the future where the upgrade would take place.					process):HNF When: 7-8-2012 How:Routine rounds noticed the improper label Problem Stelement (What is the key issue that needs to be addressed);D turn not innoved from plant once not reeded a rymone, FIVE WHY'S 1. Why did "above" happen? Verification Op/Mx did not have drum removed once no longer needed. 2. Why did "1 happen? Unable to determine due to fact no accumulation date or identifiable contents. 3. Why did "2 happen? Unable to determine when drum was used and for what purpose. 4. Why did "3" happen? Unable to determine three force operations had drum removed by hazardous waste. ROOT CAUSE: What was the Root Causes of your inscident? Durm should have been labeled properly and removed ence no longer needed.

	41316
	Richmond. GA - Richmond
	1, 7/10/2012 6:15:00 PM
	investigation Maar
***************************************	- Near
S STOP WORK pauses during a Halco Off-Load Halco delivery fuck came in to off-Load Nalco Product EC2472A/An emulation/ for his Grade Product EC2472A/An emulation/ for his Grade Product EC2472A/An emulation/ for his Grade IC247A/An emulation/ for his Grade IC247A/An emulation/ for his Grade IC247A/An emulation with his air compressor to start the halco's other Weldon Jump to progress the off-pad, Aller shift exchange, nightshift U.SR East-Sibe craw came out & rolicod a Ron-Approved Ground Clamp and guest. FIRST Stop Work Authority was used by Ope Left and an Approved Ground Clamp to Halco's SECOND Stop for Nalco, SECOND Stop for Nalco, SECOND Stop	to proceed, Ops. found Approved Ground Clean For Nation. SECONE Site Work came from the National Plant of Nation. SECONE Site Work came from the National Plant of Nation Second work at the resident Plant Color of National Plant of National Nation
	3 StoppPause work stops during Natco off-Load for an off-load of Natco Product ECG472A. (An emulating in the Chato Unit into Naco #1816 Tank. Upon atrival @1430), Nation office of which was stilling up to off-load and had Issues with his air compressor to start the Natco owned Weldon pump to progress the off-load. After shill social point greed, PIRST: Stop Work Authority was used by Ops. to find an Approved Ground Clamp being seed, FIRST: Stop Work Authority was used by Ops. to find an Approved Ground Clamp to proceed. Ops. found an Approved Ground Clamp to the Nation of t
	NI-Injuryiliness -

	Contractor			Lass	Closed	AM 7/11/2012	41371 Refinery AM  Richmond, 7/11/2012	41371
Proposition and the second	NL-Transportation -	g is damaged, can cause flat tires. Location: By	rd. Bridge damaged. By 91Gate-		resolu	7/11/2012 10:00:00	ᅽ	41771
	NL-Transportation - Company	Green Card. No one follows the 10mph speed limit on Center St. in the 0000 start time. Location :Center St.	Green Card, No one follows the 10mph speed fimil. Location: Center St.	Near Loss	Closed	7/11/2012 11:00:00 AM	Richmend, CA - 41370 Refinery	41370
	NL-injury/ilkness - Employae injury	Green Card. Unboiling fanges on P128. Aller bolls were removed we noticed a vapor escaping. Called operator and HO. They said not to continue. Location: Hydro SISO P126	Green Card. Unbolting flanges we noticed a vapor eacaping, Location: Hydro, SISO, P-128	Near Loss	Closed	<u> </u>	Richmond, CA - 41359 Refinery	41359
(1) A mechanical faiure after the shuldown caused something to districte and become the blockage endler an object was left in the line or exchangers during the shuldown.	NL- Equipmant/Property Damage - Equipmont	Fediewing the plant starture after the D&Z 4/217 major shuldown, the effluent side clinterential pressure between the reactor (F-210) and the high pressure apparator (Y-220) stoodily increased. The dFI is expected to increase over lume, eventually reaching a mechanical pressure 3/mit. When this limit is reached, the LHT will need to pull feed for alterat 24 hours to perform a hot side had gressure.	"	Near Loss	Closed	7/1/2012 12:00:00 AM	Richmond. CA - Refinery	41341
(1) A mechanical failure after the shuldown caused something to disledge and become the blockage and/or an object was left in the line or exchangers during the shuldown.	NL-Operational Process/Procedures - Plant Run Out/Stow Down	Following be plant startup after the D&T 4(011 major shuldown, the effluent slide differential passure between the reactor (R-210) and the high pressure separator (V-220) steally increased. The dP is expected to increase over time, eventually reaching a mechanical pressure limit. When this limit is reached, the JHT will need to pull feed for at least 24 hours to perform a hot strip to affered as pressure.	JHT Effluent Exchanger Blockage and dP	Near	Closed	7/1/2012 12:00:00 AM	Richmond, CA - 41341 Refinery	41341
	NI_Environmental -	3 StopPause work sleps during Natco off-Loed for an off-loed of Natco Product EC2472A, (An exustation) @ the Crude Unit mo Natco \$18 t86 Tank. Upon armiva @ 14/3D, Natco office was setting up to off-loed and had tissues with his air compressor to start in Natco owned Visiden pump to progress the off-loed. After shift exchange, high tshift DAR East-Side crew come out & naticed a Non-Approved Ground Clemp being used. FIRST: Stop Work Authority was used by Ops. to find an Approved Ground Clemp being used. FIRST: Stop Work Authority was used by Ops. to find an Approved Ground Clemp being used. FIRST: Stop Work Authority was used by Ops. to find an Approved Ground Clemp being used. FIRST: Stop Work Authority was used by Ops. to find an Approved Ground Clemp being used. FIRST: Stop Work Authority was used by Ops. to find an Approved Ground Clemp being used. FIRST: Stop Work Authority was used by Ops. to find an Approved Ground Clemp being used. FIRST: Play the second work stoppege, no raile to migrate the office of the first of the Authority was used to the order of the Authority was the first of the Authority was the first of the Authority was the Authority was the Authority was the Authority was the Authority of the Authority was the Authority was the Completed of the Authority was the Authority was the Authority was the Authority was the Complete of the Authority was the Authority was the Authority was the Complete of the Authority was the Authority was the Complete of the Authority was the Authority was the Authority was the Complete of the Authority was	driver as he realized he (WALCD) had his weldon Pump connected to D&R's of load incorrectly. (Weldon Pump discharged to Marco Tuck Surtion to D&R's of load manifold incorrectly. (Weldon Pump discharged to Nafco Tuck Surtion to D&R's of load manifold. Duning this second work stoppage D&R STL contracted Too Surtion to D&R's STL contracted Too to surply a "KIDDIE" pool as clear-plastic chum lines on siles to mitigate and the to mitigate of the Nation Work to bring Nation Pump cargo hasse as they were hooked up backwards. ThiRD Stop Work to bring Nation Driver chemical glywes to Driver c	Coss	investigation In Progresss	7/10/2012 B:15:00	Richmond, CA - CA - Refinery	41318

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	41695	41684	41642	41611	41682	41583	41550	41527	41527	41526	41473	41457	41444	41443	41382
	Richmond CA - Refinery	Richmond, CA - Referency	Richmond, CA - Refinery	Richmond, CA - Ratinary	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmend, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - 41473 Refinery	Richmond, CA · Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	CA- 41392 Refinery
***************************************	7/17/2012 10:30:00 AM	6/26/2012 12:00:00 AM	7/16/2012 4:30:00 AM	7/15/2012 11:00:00 AM	5/8/2012 12:00:00 AM	7/11/2012 7:00:00 PM	7/14/2012 5:00:00 PM	6,41,2012 12:00:00 AM	6/4/2012 12:00:00 AM	7/14/2012 12:60:00 AM	7/11/2012 10:00:00	7/12/2012 6:00:00 PM	7/12/2012 2:00:00 PM	7/12/2012 12:05:00 PM	2:00:00 PM
	invasigation in Progress	Fact Gathering	Clased	Closed	Fact Gethering	Closed	Closed	Managemeni Near Review Loss	Management	Clased	Closed	Fact Gathering	Fact Gathering	Closed	Closed
	Loss	Lass	L Negr	Loss	Loss	Near Loss	Near	Loss	1 Naar Loss	Near Loss	Loss	Hear Loss	Near Loss	Near Loss	Coss Soar
Outing routine area audit a LOTO box was discovered	Diesel Leak From BAPt.	TP-264 Coupling Failure	completed round not approved	Employee felt eye irratation during the course of work. Employee fried flushing eye but still felt irratation so he reported to his Supervisor	No fit test data for 7 employees on 5-8 and 5-9, 2012.	Green Card, Leaking sewertwater line that has caused a sink hole, Location: Rcd & Gun	Entry of Intelletres sign-	Operator exceeded CaVOSHA Permissibles Exposure Limit for Benzene while sempling a gasoline tank.	Operator exceeded CaVOSHA Permissibles Expecuse Limit for Benzene while sampling a gasoline lank.	#7 Bailer tripped off line	Green Card, Fuel trucks are not grounding their truck when dispensing fuel. Location: REFWERY-WIDE	USE Operator teken to Kalser by Ambulance	Possible Mercury exposure	RLOP GRU liquid foed pump seal failed. Triggered HZS alarm.	removal process of the Diversion Box
	The Bay Area Pipeline booster pump P-18 developed a Diesel leak on the Suction Line PRD leg post start up around 10:00. All appearances are that a coupling may have backed off due to vibralien. The leak was to containment and spotted early into the event by the Refine Head Operator.	FOR COMPLETE TOP REPORT SEE LINK ATTACHED, thiss Roport TP- 264 coupling dailine appears to have been caused by locked geen coupling due to leas of coupling greas.	HO did not approve completed SGRU round	Employed fell eye irrelation during the source of work. Employee tried flushing eye but stiffelt irrelation so he reported to his Supervisor.	Records indicate no data for fit lest of 7 employees. Data was checked on all machines and not available. There is a training sheet showing participation by employees and fit test cards wire e issued.	Green Card. There is a leaking severul/valor line that has caused a sink hole. 2n cliamater x 4-5th deep. There are kids at thase softed igames (2-4yrs od) and one of them straet went dewn the hole. Currently there is only (2) traffic cones and a coadside safety barrier, Current seltus is unacceptable. Swerthwate fine needs to be fixed and sink hole filled or trench piet placed ever the sink hole. Location: Rod & Gun, 30th betrind soktball field #1 Backstop	Operator breaking in on job had password issues togging onto inteleture and signing off on rounds at the end of the day, Other operator working the same job was sampling a tank at that time and was unable to sign off on the residence rounds before 17:00. NLI: Operator failed to sign off intelleture terms on-time. Why 17 Operator could not log on. Why 27 Operator had forgotten password.	Operator exceeded CaNOSHA Permissibles Exposure Limit for Benzons white sampling a gasoline tenk.	Operator exceeded Cel/OSHA Permissibles Exposure Limit for Benzene white sampling a gaseine tank	At approximately 00.50, 7/14/12 Boiler # 7 Iripped offline. Doing a field assessment on the cause of the shudown, we determined that the Irip throttle on the Woodwerd governor ripped causing the spend probes to shufdown #7 boiler.	Green Card Fuel trucks are not grounding their truck when dispensing fuel to equipment or tanks, oceation: REFINERY-MIDE	Operator complained of chast painstheart paipilations and requested Plant Protection to evaluate via plant radio.	Mainbrance was installing P-104 tift pump at it is expected. Once the pump was placed in position, an array permit was needed because to attach the strough required breaking the plant. Testing conducted by Plant Pictedion indicated elevated tends of hydrocarbon plus Marcury.	RLOP/SRU P-1903A liquid HC pump seal leak which triggered H2S elarm 85/A007. Operation responded promptly.	be pumped out. The mixing and agitation of the studge can liberate small amounts of H2S.
	Environmental	Equipment/Property Damage	NL-Business Process - Business Process	NL-Injury/Illnoss - Employes Injury	NtRegulatory Compliance - Non Compliance	NL-Lessons Learned	NL-Business Process - Business Process	NL-injurylliness - Employee Injury	NL-Operational Process/Procedures - Safety Systems	NiBusiness Process	NL-Lessons Learned	Nt Sensitive/Commercial (Must be associated with another subtype)	NL-injuryilliness - Employee injury	NL- Equipment/Property Damage - Equipment Damage	Process/Procedures - Safety Systems
	(1) 3-Person selected to perform this task did not have the night skill of knowledge. Original design spec did not meet modern standards. Past work process failures allowed coupling to be installed up stream on the pressure side of the PRD.							(1) Sample station (box) door is solid steel and does not have a wondow, does not allow operator to see level in sample botte.	(1) Sample station (box) door is solid steel and does not have - a window, does not allow operator to see lovel in camplo belte.	(1) Root cause is unknown. Ops wit monitor closely for unusual behaviors. OST (rip will be tested this monitor of suggest, 2012 which will confirm OST did or did not maillunction				(1) Seel ran dry, see 5 why https://loollab001- hou sp.clievron.revisites/dsymigee/LPSOudRiDecLib/F- 1903%205%20Why docx	

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	41877	41858	41858	41856	<b>4</b> 1856	41856	41706	41728
	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - 41858 Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA -	Richmond,	Richmond, CA- 43728 Refinery
	7/19/2012 1:00:00 PM	6/20/2012 3:00:00 PM	6/20/2012 3:00:00 PM	6/20/2012 3:00:00 PM	7/13/2012 2:00:00 PM	7/13/2012 2:00.00 PM	7/18/2012 1/47:00 PM	7/17/2012 8:00:00 PM
	Fact Gathering	Fact Gathering	Fact Gathering	Fact Gathering	Fect Gathering	Fact	Closed	Fact Gathering
	Near Oss	NB14 Loss	Loss	Negr	Loss	Lors	Loss	Near Loss
	Sink Hole under ladder at V-1942	The supplier did not meet critical delivery date on purchase order.	The supplier did not meet critical delivery date on purchase order.	The supplier did not meet critical delivery dele on purchase order.	K-1900 Nulsance Alarm	K-1900 Nulsance Alerin	PPS Parci Officer brushed a fence post at Gata 49 on Waston drive white parking the Patrol vahicle affer making the Patrol vahicle affer making the sounds on Wheelm Drive. He sighly brushed the fence post at 49 gate with the passenger-side mirror riself to dislodge from its base and dishop and no damage to PPS proparly. The mirror was re-sitected.	locked to a stantion under the #4 C/U rasid filters. No lock could be located to unchain said box.
	As operator was about to use ledder to V-1942, he noticed a sink hole at the base of the tedder. That is at the base of the north side ledder to V-1942. Upon further inspection, sink hole is as least 4 feet deep, and at least 3 feet wide. Surface hole is only a few inches wide.	Order placed with contract supplier on 05/18 for delivery on 05/20. On the afternoon of expected delivery, contract supplier was contacted by their ritrid party supplier and advised that product would not be available as planned.	Order placed with contract supplier on D6/18 for delvery on D6/20. On the attempt on D6/20, on the attempt on the product delvery contract supplier was confacted by their third party supplier and advised their product would not be available as planned.	-	In active slarm was found on the Mullih protecting MK-1900 at RLOP. The slarm reported that the tip oai of the circuit breaker was not functioning, which would result in the circuit breaker being unable to properly protect the motor. The electical Oh, iSE Engineering, and ISE Shop electricians were involved in troubesthooling this team. It was found that the Mullim was impropedly programmed, the tip poil was found that the Mullim was impropedly programmed, the tip poil was handley, and the alarm could be irealed at a fields alarm. 5 WHY! Class: Menhours used to troubstance the alarm. 5 WHY! Class: Menhours used to troubstance the alarm. 5 WHY! Class: Menhours used to troubstance the alarm sea for the proper (The relay functionality was tested). Why? The relay programming was not proper (The relay functionality was tested). Why? Engineer did not program the laam out of the may. Why? Lext of Skill or Knowledge.	An active starm was found on the Multin protecting MK-1900 at RLOP. The alarm reported that the tip oal of the circuit breaker was not functioning, which would result in the circuit breaker being unable to properly protect the motor. The electical OA, I&E Engineering, and I&E Shop electricats were involved in troubsthocking this beam. It was found their the Multin was impropedly programmed, the tip oall was healthy, and the alarm could be treated as a fisse elem. 5 WHY: Loss: Memburs used to troubstance the elementhy? The relay displayed a nutsance elem. Why? The relay programming was not pruper (The relay functionality was tested). Why? Engineer did not program the starm out of the areay. Why? Laxk of Skill or Knowledge.	PPS Patrol Officar brushed a fence post at Cate 49 on Western drive white parking the Patrol vehicle after making his rounds on Western Drive. He lightly brushed the fence post at Gate 48 and caused the mirror itself to dislodge from the base and fat to the ground. Those was no damage to CVX property wind to learn and the damage to PPS property. The dislodged mirror was it e-attached.	During rouline area audit a LOTO box was discovered locked to a stantion under the #4 CAJ resid fillers. No tock could be tocaled to unchain said box
	NL-Lessons Learnad	NL-Operational Process/Procedures - Plant Run Out/Slow Down	NL-Lessons Learned	NL-Quality - Product Unavailable	Business Process	NI-Lossons Learned	Transportation	NL-Operational Process/Procedures - Safety Systems
(1) FIVE WATY One Page Report Incident Number Business Unit Location Facility Name Incident date Type of Process: Type of Equipment: Team Members: incident Description: What. Employee was silting in his truck at treak wearing the safety glasses. He was feeling lind so he removed his glasses to rub his eyes at which point he left something in his eye. He attempted to wash it out, but was unsuccessful. Where (location or where in his process): In work truck tocated at RDC. Whon: July 17, 2012 How: Roubbed his eyes during break. Problem Stetement (What is the key Issue that needs to be addressed?). How to prolest yourself from intsollianeous partices in the eye. FIVE WHY'S 1. Why did above Theppony Torification Employee removed safely glasses and rubbed his eyes with his hands. 2. Why did 1'heppony? Employee was feeling time and it was towards the end of the day. 3. Why did 2'happon? This is a common practico when you are feeling trod. 4. Why did 3' happen? 5.					(1) 5 WHY. The relay displayed a nulsence elem. Why? The delay programming was not proper (The relay functionally was tested). Why? Engineer did not program the elem out of the elley. Why? Led of Skill or Krowkedge. the	(1) 5 WHY: The relay displayed a nuisance alarm, Why? The early programming was not proper (The relay functionally was tested). May? Engineer did not program the alarm out of the elay, Why? Lead of Skill or Knowledge.	(1) hattenlive driving. Patrol Officer misjudged distance bowers if fance post and vehicle, causing passenger mirror to strike Gate 48 lence post while altempting to park the park live park the park th	

https://impacterm.chevron.com/IMPACT/ANYWHERE/Reports/exports/scenario_159134_f8a5390b-1e90-4874-b012-4d17412a3a40.htm 8/9/2012

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	42097	42092	42092	42077	42018	42010	42002	<b>↓</b> 1010	41913
	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond. CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmend,	Richmond, CA - Refinery
	7/17/2012 9:00:00 AM	7/17/2012 8:00:00 AM	7/17/2012 8:00:00 AM	7/19/2012 4:30:00 PM	7/21/2012 11:56:00 PM	7/21/2012 7:10:00 AM	7/20/2012 4:00:00 PM	7/19/2012 2:30:00 PM	7/19/2012 2:30:00 PM
	Closed	Fact Galbering	Fact Gathering	Closed	Management Review	Management Review	Fact Gathering	Fact Gathering	Fact Gathering
	Near Loss	Loss	Loss	Near Loss	Loss	Near	Loss	Loss	Loss
	Green Card. Missing railing above validation tank #2. Location: B&S 17 Pump Station	Tied into incorrect line (condensate instead of 150# still). Also, project was completed prior to MOC Stage 1 composition	Tied into incorrect line (condensale instead of 150¢ stim). Also, project was completed your for 10 MCC Stage 1 completion	Green Card. Excassive speed in parking lot area. Location: North Contractor Parking Lot	Lost Nox steam flow to the contibustor on Cogen 2000 Train causing a Nox accidence.	Gasoline leaking from tubing to the ground (asphalt).	600r product routed off test	Employee (Ell something in Na eyo	Employae fell something in his eye
7:-1504 (recovered oil) draws water fevels down by a system where the	Grean Card, Wooden rating above validation tank #2 is missing causing a safety hazard, Location, 65.5 \$17 Pump Station	A sleam driven reciprocating pump (a.k.a. Big Bertha) was being used to verify that the circulating notaties on 1-3162 were eleatruspituged for repconing 5/0. EWO specified that their first seams supply of pump was to be on 2 fire which furned out to be the condensate header. Altempt to operate reciprocating pump was unsuccessful. Engineer was called to help troubleshoot. Upon aimvel at size it was recognized their wrong line was stod into. Secondly, the work to clear these nozates, which included operation of steam driven pump, was completed prior to complete on of Stege 1 of MOC#25122. There was no PSSR done prior to energizing pump.	A steem driven reciprocating pump (e.k.a. Big Bertha) was being used to verify that the circulating necable on 1–3162 were clearfungsget for upcoming \$10. EV/O specified that the first seems supply of pump was to be on 2 fine which lurried out to be the condensate header. Altempt to operate reciprocating pump was unsuccessful, Englineer was called to help troubteshoot. Upon amyet at take it was recognized that wrong line was thed fints. Secondly, the work to clear these nozzles, which included operation of steam driven pump, was completed port to complete on of Stegs 1 of MOC#25122. There was no PSSR done prior to energizing pump.	Green Card. All he very end of the North packing lot, a small group pack their cars and tracks. I was pulling out of my packing spot. Hooked both wery, it was clare, but no sooner had fulled out and a white Dodge Asd pickup was right on my bumper. There is a lot of excessive speed coming from that end of the parking lot. Its an accident waiting to happen. Location: North Contractor Parking Lot.	At approx 23:56 hts. on 7721/12, the Cogen Board Operator received an alarm for a high level in the 2000 Train medium pressure dram and then a Nox alerm. Nox steam flow to the combustor was tox for an unknown treasure, At control valves on the DCS where in the normal position. The Cogen Turbine Operator was otispectated to the field and found that the Nox steam control valve (22Z,23D) had closed for unknown reasons while indications inside still show the valve as open.	Gasoline leaking from tubing to the ground (asphalt) from the field line sample filter of the comparator bidg. Quantity < 19 gal.	Al approximately 1600 on 7/20/2012 the HNF Almos, column bottoms Flow dropped off and Tripped F-1850 C-1850 bottoms (currently 6/07) was routed (off test as a precaution, Operations worked to opt the flow reestabilished and the plant is currently stabilizing. The P-1635 pumps appeared to gas up.	Employes was siting in his louck at break waaring his safety glasses. He was seeing tied so he removed his glasses to nob his eyes at which point he last semething in his eye. He attempted to wash it out, but was unsuccessful.	Employee was silting in his truck at break wearing his safety glasses. He was feeling lived so he removed his glasses to rub his eyes at which point he felt something in his eye. He attempted to wath it out, but was unsuccessful.
	Nt-injay/iliness - Employee injay	Process Safety Management (PSM)	Business Process	NL-Transportation - Contractor	Environmental	NL-Environmental - Operational Leak	Operational Process/Procedures	ក្រុំក្យា/រិវិតទទទ	NL-Injury/litness - Contractor Injury
			-		(1) At this time troubleshooting is complete from the controls, ops and the IdE end. We have come to a conclusion the problem may exist metallicularly internal to the valve actualor and/or valve itself. This ist of action tiems are placed on the upcoming. "B" haspection worklist for March, 2013 to formoveringtace and chack all valve components are thoroughly inspected.	(1) Connoction (compression filting) were out over time due to exposure to the elements, expansion f contraction due temp change, vibration etc.		1) "FIVE WHY" One Page Report Incident Number Business Unit Location Facility Name Incident Agent Type of Process: Type of Engineers: Team Member: Incident Description: What Employee was telling in his truck at break westing his safety plasses. He was fishing in list bruck at break westing his safety plasses, the was fishing in look on the removed his glasses to rub his eyes at which point he felt semething in his safety plasses. He was fishing it led so the removed his eye. He attempted to wash it out, but was unaccessful. Where (location or whore in the process) in work truck focated at ROIC. When, Juby 17, 2012 How, Rubbod his eyes during break. Problem Statement (What is the key issue that needs to be addressed?); How to protect yourself from mitscallineous particles in the yee, EVIEU WHY'S 1. Why did needs to be addressed?); How to protect yourself from mitscallineous particles in the yee, EVIEU WHY'S 1. Why did "Tappen? was feeling lifed and it was towards the above" happen? a was feeling lifed 4. Why did "3" inappen? a was feeling lifed. 4. Why did "3" inappen? a was feeling lifed. 4. Why did "3" inappen? a was feeling lifed. 4. Why did "3" inappen? a was feeling lifed. 4. Why did "3" inappen? a was feeling lifed. 4. Why did "3" inappen? a was feeling lifed. 4. Why did "3" inappen? a was feeling lifed. 4. Why did "3" inappen? a was feeling lifed. 4. Why did "3" inappen? a was feeling lifed. 4. Why did "3" inappen? a was feeling lifed. 4. Why did "3" inappen? a was feeling lifed. 4. Why did "3" inappen? a was feeling lifed. 4. Why did "3" inappen? a was feeling lifed. 4. Why did "3" inappen? a was feeling lifed. 4. Why did "3" inappen? a was feeling lifed. 4. Why did "3" inappen? a was feeling lifed. 4. Why did "3" inappen? a was feeling lifed. 4. Why did "3" inappen? a was feeling lifed. 4. Why did "3" inappen? a was feeling lifed. 4. Why did "3" inappen? a was feeling lifed. 4. Why did "3" inappen? a was feeling lifed. 4. Why did "3" inappen? a was feeling lifed. 4. Why did "3" inappen? a was feeling li	Why did "4" happen? 6. Why did "5" happen? 7. Why did "6" happen? 8 Why did "7" happen? ROOT CAUSE: What was the Root Cause of your incident? In the pest, did not follow procedures or acceptable practices and no incider! occurred. Contributing Factors: LPS Factor.

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42219	42213	42211	42209	42207	42204	42203	42200	42183	42181	42179	42099
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7/11/2012 2:45:00 PM	7/5/2012 3:30:00 PM	6/28/2012 10:30.00 AM	0/20/2012 9:30:00 AM	6/27/2012 2:35:00 PM	6/24/2012 6:00:00 AM	6/20/2012 12:15:00 PM	7/24/2012 12:00:00 AM	7/23/2012 5:00:00	7/24/2012 8:00:00 AM	7/18/2012 12:00:00 AM	7/19/2012 12:00:00 AM
Ciosed	Closed	Closed	Closed	Closed	Closed	Closed	Management Review	Ciosad	Clased	Closed	Investigation
Loss Loss	2 2	Loss	Loss.	Near Loss	Logs X	Logs Logs	L Near	C 2 0 0 0 0 0 0	Near Logs	Logg	
Green Card. No flange legs when opening manways, Location: Refinery	Green Card. Ground is covered in ell. Location: SISO - K920	Green Card. A loose manifold needs adjusting. Location: FGR	Green Card. A valve leaking from valve stem. Locallon: DBR, next to safely shower	Green Card. EE walking with shoe laces united and hands full, Location: SISO - F135	Green Card. A faced stop sign. Location: Redwood's office	Green Card. Panels broke off and water spilling out. Localion: FGR, Westside of Cooling Tower	CS-36 failed to pop within 125% of cold set pressue.	Vehide seen speeding on Pekralite Steel near the D&R Control House.	EE was not feeling well and was seen at the clinic	High Slike level in both LP & HP boiler feed water	T-1504 Carbon Filters: V-2 ruptured discrete to overpressure
Green Card. When opening manways there are never any flenge tags.	Green Gard. While working near K920, I notice that the ground is covered in oil. Everywhere you look, there's oil. Location: SISO - KI2D	Green Card. More often than not when we use supplied fresh air to do our work safely, the manifold is always loose and needs adjusting a few turns or more. We are not certified to adjust this equipment, Location: FGR	Green Card. There's 2.8° 900 valves leaking from the valve stem next to the safety shower 43FSH130. There's also a 1° valve that's leaking in the seme area. Location: D&R GHT Plant	Groon Card. I noticed an employee walking with his hands full while one of his shoeledes was united, Location: S. Isomax - F135	Green Card. Driving from Redwood's office, there is a stop sign that is so fadod it can't be seen. Localion: Redwood's office	Green Card. Westalde of the Cooling Tower there's panels broke off end water is spling out. Loration: FGR - Westside of the Cooling Tower	C6-36 was removed from service for recertification. The set pressure was 100 pst. The veive popped @ 128.16 above the 125% limit per the Rt.	while driving on Standard Road passing the D&R ABIL Offices I observed a van Iraveiting north on Percille Street at a high rate of speed. As I approached the intersection of Percille Street I could see the electronic speedomater sign located north of the two bridges connecting the readway with D&R. The electronic speedomater stem coated north of the two bridges connecting the readway with D&R. The electronic speedomater sign was started and the coated passed that it back of the electronic speedomater sign was started and the poster speed limit on Perticile Street I a 20mph. I watched the van mate a tell furn and go across the northermost bridge into the D&R particular started that the back of the Swan was change and green. As I continued to travel north on Patricile Street I gassed the D&R control house and saw rate a particular street in the van was change and the driver and sawcel passengers were waiting from the van into the control house. I was wable to saw who was driving the van but because the other's door was spen I could see that the driver had exided the vehicle. Since I was driving with a more expetienced employee I stepped the case at the D&R turn off and we discussed if any immediate corrective section could be taken. Since the ven was already stopped and the driver had let we see decided that submitting a green card would be the most appropriate solution. Who observed that the van had a one of the heat shrink safely decals on it and the world "POWER" printed on it.	EE was not feating well and was seen at the clinic. He was then sent the see	Sitta had been high in both LP and HP boiler feed water and in the boilers for a couple of days. The concern – High slica can carry-over into the steam and depostl out onto furthing blades. And cause severe demage. (i.e. well gas compresser)	potentially sour water is passed through a series of carbon fillers, then down the lock box which transfers the water on to EDO. The system is protected by two 75 ib rupture discs. One disc was ruptured on V.2, which caused issues with drawing down the water leve to the need for carbon filler water for drawing down the water due to the need for carbon filler applacement. Arear Loss: Unable to draw down the level in T-1504 Recovered Oil Tank, Virty #1: Unable to safely draw down the seur water from the lank. Why #1: Unable to safely draw down the sour water from the lank. Why #2: V-1 carbon filler was spent, end V-2 had a ruptured disc. Vhy #3: 2 possible seenatios for a ruptured disc. (1) Valves dosed on the fifters when drawing down T-1504. (2) Hammoning of the lines bic a rative was opened too quickly. Why #4: Further investigation needed.
NL- Equipment/roperty Damage - General Liability	Nt-injury/illness - Contractor injury	NL- Equipment/Property Damage - Equipment Damage	NL-Environmental • Operational Leak	NL-injury/iliness - Contractor injury	NL-Transportation • Company	NL-Environmental - Operational Leak	NL- Equipment/Property Damage - Equipment Damage	NL-Transpotation ·	NL-injury/iliness - Employee injury	NL-Operational Precess/Procedures - Se'e Operating Limit (SOL) Exceeded	Operational Process/Procedures
							(1) Believe that valve has lifted or previously leaked by allowing moditure to collect in cullet cavify causing CS components to corrode. This caused the disc holder to selze in the guide.			(1) 1. No notification to the FCC after isolating the condensate fine to 7-2520 from the FCC. 2.No Procedure or Bakelite tag in velve area 3. No check valve in the FCC to protect the FCC BFW system.	

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42400	42400	42396	42386	42343	42325	42318	42317	42316	42315	42313	42304	42302	42301	42300	42221
Richmond, CA - Refinery	Richmond, CA - Refirery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Rofinary	Richmond, CA - Retinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA • Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - 42221 Refinery
7/15/2012 10:00:00	7/15/2012 10:00:00 AM	6/18/2012 10:30:00 AM	7/24/2012 1:00:00 PM	7/25/2012 12:90:00 AM	7/25/2012 9:15:00 AM	7/20/2012 9:30,00 AM	7/20/2012 9.00.00 AM	7/20/2012 0:00:00 AM	7/20/2012 11:20:00 AM	7/17/2012 6:30:00 AM	7/13/2012 10:30:00 AM	7/26/2012 12:00:00 AM	7/12/2012 11:00:00 AM	7/12/2012 8:30:00 AM	9/15/2010 12:00:00 AM
Closed	Clased	Closed	Investigation In Progress	Closed	Clased	Closed	Closed	Closed	Closed	Fact Gathering	Closed	Closed	pecelO	Closed	Fect Gathering
Near	Loss Vest	L SS S	1 Near	Near Loss	Neer	Near Loss	Near Loss	Loss Near	Near Loss	Near	Near Loss	Near	Near	Near Loss	Noar Loss
Green Card. Welder didn't see alec cord white welding. Location: #1 Power Plant #3 Boiler Ash Hopper	Green Card, Welder didn't see electord while welding, Location; #1 Power Flent #2 Boller Ash Hopper	Green Card, No berilcade teps up. Location: Hydro - FGR	Tollet ilsaue dispenser broken causing it to fell very close to the face of any person using the restroom. High potential for an injury.	RLOP flere Totalizer Inpped while blowing down K-1400 case drain	Damage to underground paty air line	Green Card. Noticed bracket hotes on skin and on angles, Location: #3 Botter House	Graen Card. Vehicle going ever speed limit. Location: Power House	Green Card. #3 Boiler scaffold bar is slicking out Location: #1 Power Plant	Green Card. #5 Boiler, 2nd deck on the butside rail is rusted. Location: #1 Power Heuse	Green Card. Need Safety altendent cards for training cert. Location: Power House	Green Card. An I-Beam is missing 3 bolls. Location: Boller #3 on entry north #5 on a pipe station	IX-7346 popped at less than 50% of authorized set pressure.	Green Card, People tripping over patking lot bumpers, Location; Gate 91 parking let	Green Cerd. Large amount of algae on ground. Location: FCC P107	ACD Process not completed for AL-1468 to AL-1472 conversion.
Green Card. (Blind Spot) Worker didn't see electrical cord opposite sido of steel plate white outling with forch. Localion: #1 Power Plant #3 Boller Ash Hopper	Green Cerd. (Bilind Spot) Wekler didn't see electrical cord opposite side of sleel plate white cutting with torch. Location: #1 Power Plant #3 Boiler Ash Hopper	Green Card, While working at the FGR unit, I saw a crane make a pick and there was no barricade up. Localion; Hydro - FGR	A contract employee was using the women's handicapped restroom stell in central metrienance. Upon palling on the totel these paper roll, the face place of the dispenser came down forward into her lap very close to her face.	White blaving down K+400 case drain, the handwraet led off of the stent effer the valve was opened. During the time it look isoleto the case drain from an alternate location, the case gassed through to raise causing the totalizer to trip. There was no visible flaring (Confirmed by RSL via flare carn).	At the 260 chennel at Honelland Security Enhancement Leaner's base #200 a ground not was being driven next to the camona base. About 4 feet down the cod nit a 2" poly air line that was not picked up by U.S.A.	Green Card. Contractor working inside hole leaching on brackets, I nollood white lacking these was various holes on skin and on the angles. Location: #3 Botter House	Green Card. Vehicle was going over the speed limit and didn't come to a complete step at step sign Location. Power House	Green Card. #3 Boiler. Observed a scattoid bar is sticking out. Location: #1 Power Plank	Green Card. #5 Boiler, second deck on the outside rail is "usted and in need of repair. Anyone learning against it can seriously get hurt. Lecation: #1 Power House	Green Card. Need Safety Attendant Cards for training cent. Need cards to be given once test has been graded, before gating an oudit by safety.	Green Carel By Boiler 3 on anny north #5 on a pipe stellion just across from the deck is an unconnected i-Beem missing à buils (not consorred). The pipeway is empty (no weight on it), buil in an earthquake it could be an extreme hazard. Check it out, it might not be nothing, but it should be addressed by Chevon safety (enconnected weekers the entire structure horizontally and vertically). It needs a small tack weld only. Location: Boilor House	During Irilial test IX-7346 relieved at 237.91 psi. This is below 90% of the authorized set pressure of 285 psi.	Green Card, I noticed a few people tripping over the parking lot bumpers at Gaits of in trunk of the porch. The reason people don't are the bumpers is because the paint has wom out and camouflages with the gourd. Also the bendrells reced to be fixed and the boards on the porch are loose. Location: Gate of:	Green Card. While I was working on the VOC exposystem. I noticed a large amount of eiges on the ground. So I got a workdown hose and sprayed it all down so no one would slip and hun themselves. Location: FCC - P107	705A submitted to change AL-1488 to AL-1472 was not completed. Making valve blind to PM activities.
NL-Fire/Explosion	Nt-Lessons Learned	NL-Injury/filness - Contractor Injury	NL- Equipment/Property Damoge - General Liability	NL-Environmental -	NL-Lessons Learned	NL- Equipment/Property Damage - Equipment Damage	NL-Transportation • Company	Nt-Injury/liness - Contractor injury	NL-Injury/Illnoss - Contractor Injury	NL-Business Process - Business Interruption	NL- Equipment/Property Damage - Equipment Damage	NL-Operational Process/Procedures Pressure Reser Devices (PRD)	NL-Injuryillhass - Contractor Injury	NL-Injury/Illness - Contractor Injury	Process/Procedures - Pracess/Procedures - Prassure Relief Davices (PRD)
			(1) Repair broken tollet tissua dispontor									(1) Product found in seat reason unknown.			

42519	42518	42518	12153	42416	42416	42415	42415	424.3	42413	42411	42409	42409	42406	42404	42403
Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - 42453 Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Relinery	Richmand, CA - Refinery	Richmend, CA - Refinery
7/25/2012 12:00:00 AM	7/26/2012 8:00:00 AM	7/26/2012 8:00:00 AM	7/25/2012 7:00:00 AM	7/20/2012 2:00:00 PM	7/20/2012 2:00.00 PM	7/19/2012 1:00:00 PM	7/19/2012 1:00:00 PM	7/19/2012 1:00:00 PM	7/18/2012 1:00:00 PM	7/19/2012 10:00:00 AM	7/19/2012 10:00:00 AM	7/19/2012 10:00:00 AM	7/19/2012 8:30:00 AM	7/18/2012 3:30:00 PM	7/17/2012 1:00:00 PM
Fact Gathering	Fact Gathering	Fact Gathering	Closed	Closed	Closed	Clased	Clased	Closed	Clasad	Closed	Closed	Closed	Closed	Clased	Closed
Logg	Loss	Logg	Near Loss	Near Loss	Loss	Neer Loss	Naar Loss	Near Loss	Near Less	Near	Naar Loss	Near	Near	Naar Loss	Near Loss
Drive failure on RIC841ntg3db3	Mis-manifolding of Naphiha into T-397	Mis-markoding of Nephtha into T-397	Green Card, Dirty windows on vehicles creates poor visibility, Location: Refinery	Green Card. Welders welding inside confined space without respirators. Localion: Power Plant	Green Card, Welders welding Inside confined space without respirators. Location: Power Plant	Green Card. Sheet of metal with sharp edges. Location: Power House	Green Card, Sheet of metal with sharp edges. Location: Power House	Green Card, Welder grinding without a face shield. Location: #3 Power Plant #3 Boiler	Green Card. Welder grinding without a face shield. Location: #3 Power Prant #3 Boiler	Green Card, Contractor rudely throwing materials off rolling cart. Location: #5		Green Card. Contractor not using barricade tape. Location: #5 Powerhouse	Green Card. Contractor in Power House wearing dark glasses.	Green Card, Trees blocking visiblity. Location: B&S - Quarry Rd adjacent to TK-957	Green Card, Contractor climbing ladder with toels in hand. Location: #3 Power House
Experienced two drive fallure on SQL Datebase server, ric841nlg3db3.	T-3222 was transferred to T-397 from the water draw via 182 the, Proor to be transfor, the water draw valve on T-3197 was checked, and it did not move, so it was assumed that the valve was cosed, T-3222 level transferred reached zore at epproximatioly 2000 on 0725, P-11 (water draw transfer purp) was not shutdown because suction was still being pulsed. Daystift discovered the Isrue when it was seen that T-3222 level was reading zero and T-397 tank was still rising, it was discovered that the water draw valve on T-3197 had been left open. A secondary block water was closed to prevent further transfer out of T-3197. RSL & planners notified.	T-3222 was transferred to T-397 from the welor draw wile 162 fno. Prior to the transfer, the water draw velve on T-3197 was checked, and it did not move, so it was assumed that the valve was closed. T-3222 level transferred reached zero at approximately 2000 on 07.65, P-11 (water draw transfer pump) was not shufdown because section was still being pulled. Depails discovered the issue when it was seen that I-3222 level was reaching zero and I-397 tank was still shing, it was discovered that the water draw valve on T-3197 has been for open. A secondary block tway was dosed to prevent further transfer out of T-3197. RSL & planners notified.	Green Card. Many cars and trucks with dirty windows. This makes for poor visibility. Location: Retinery	Green Card. Welders welding inside a confined space without respirators. Location: Power Plant	Green Card. Welders welding inside a confined space without respirators.	Green Card. On Bolier #3, I not cad a sheet of stin metal laying on a table with 4 sharp edges and if you welk past, you could get hurt or cut. Location: Power House, Ediler #3	Green Card. On Boller #3, I not ced a sheet of skin metal laying on a labdo with 4 sharp adges and if you walk past, you could get hurt or cut. Location: Power House, Goller #3	Green Card, Welder grinding without a face shield. Location: #3 Power Plant #3 Boiler		Green Card. Contractor rudely throwing melerials off of rolling cart to get his job done, realizing he dight need it and dight bother to pick up materials, location: ## Powerhouse	Green Card. Contractor lowering down header from steam drum without any barricade appea to let others know what's going on, Locallon: #5 Powerhouse	Green Gard. Contractor lowering down header from steam drum without any bernicade hapes to let others know what's going on. Location: #5 Fowerhouse	Green Card. Contractor In Power House wearing derk glasses.	Green Card. Single lane corner, trees blocking visibility, trucks parked on both sides, confusing in mirror, honk at comer, too late. Locallon: B&S - Quarry Rd edjecent to TK-957	Green Card, Contractor climbing ladder with tools in hand Localich: #3 Power House
Business Process	Operational Process/Procedures	Environmental	NL-Transpodation - Company	NL-Injury/illness - Contractor trjury	NL-Lessons Learned	NL-Lessons Learned	Nt-Injury/läness - Contractor Injury	NL-Lessons Learned	NL-injury/illness - Contractor injury	NL-injury/liness - Contractor Injury	NL-Injury/Iliness - Contractor Injury	NL-Lessons Learned	Nt_Injury/liness - Contractor Injury	NL-Transportation • Contractor	NL-injury/iliness - Contractor injury

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	42790	42692	42515	42603	42544
	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Rofinery	Richmond. CA -
	7/31/2012 8:30:00	, 6/26/2012 12:00:00 PM	7/26/2012 10:00:00 AM		7/28/2012 7:00:00
	Fact	Closed	Closed	Closed	Fact Generating
	Con	<u> </u>	Loss	Near	
Earlier this week at the Caraking and Hydro Operator Safely Meeting a discussion took place about a fatality on a cament/ mortar mixer. When the Field Safely Coordinator was riding their bike by the Sisco Rare K-1070 repair job the saw a coment / mortar mixer, the notices that it did not have a properly functioning kill switch and the guarding was suspect. FSO taked to the cawe	Earlier this week at the Cracking and Hydron Operator Safety Meeting a dacussion took place about a rikeling on a cement? mortar mixer, when the Field Safety Coordinator was riding their blace by the SISO Flare K-1070 repair job he saws a cement? mortar mixer, the noticed that it did not have a property functioning kill switch and the guarding was suspect. FSO laked to the creative mixer, the notice stant? So laked to the creative mortal mixer. The site of comman (uncloned stant? stop kill switch. The site of comman removed the equiptement out of service and a NLI was entered.	Nissing Semples for Sthen tow Octana Test	AC Unit is at eye level & has a sharp edge on the bottom.	IL-3318 (PRD) for V-3337 Instrument Air Knockout Pot was pulled for PM replacement of the PRD. The space PRD brought by maintenance did not fit.	Riop B-Crew worked understaffed below minimum crew.
	Earfarthis weak at the Cracking and Hydro Operator Safety Meeting a discussion took place about a fability on a centent / mortar mixer. When the Field Safety Coordinator was riding their bike by the SISO Fare K-1070 repair job he saw a coment / mortar mixer. He notified that it did not have a property functioning kil switch and the guarding was suspect.	Oils Planting requested a tell set of samples on #5 Rheoflormer for improving Pator mored at 42 RRON, PED scheduled the test run for Juno 28th, 2013 with Dils Planting/Qporations Coordination, PED fotowed Refinery Sampling JLA, updated STA* JUNS semptoe adhection for a frest run, with ACO's approvel, and sent a detailed operating instruction for greated grant samples or June 32th, the recycle H2, V-590 off-gas, C-4410 bottoms, and C-590 bottoms for GC-DHA were missing. By not having all the samples, an accurate mass belance/PETRO model update cannot be performed. The result is a delay in the PETRO model update cannot be performed. The result is a delay in the PETRO model update cannot be performed. The result is a delay in the PETRO model update cannot be performed. The result is a delay in the PETRO model update had the sumples, and coordinating sampling, tracking down samples, and investigation, of hours spent coordinating sampling, tracking down samples, and investigation.	AC Unit is at aye lovel & has a sharp edge on the bottom. A few others have noticed this.	This vessel is connected to V-3336 instrument Air receiver which is protected by PRD's (IL-3303 and IL-3305) both set at 150 psig.	Riop B Crew want below Minimum Crew level. Minimum Crew is 7 people. Riop worked with only 6 people for 7.5 hours. During the weekend of July 27 - 29, four of eight crew members were off crew. The off crew members is it consisted of two plannest vectority 5 (1 vacator, 1 AB 109) and the our plannest (2 off sick). The standby person was celled to cover a job, this still all one job vectors. Between the HO and STL, 10 phone (Home & Cell) cells were made to C, D and E cower be back fill the vacatory, Ofthe 10 cells/mossages made no one bothered to answer or return a stroje call. One possible remedy to help seed or mitigate this situation from happaning again is to have two person standby lists, in this section of Hydro
	NL-Operational ProcessFrocedures Safety Systems	Business Process	Ntinjury/ilness - Contractor injury	NL-Operational Process/Procedures - Pressure Relief Dovices (PRD)	NL-Regulatory Compliance - Non Compliance
(1) What happened? At the SISO Flare Compressor K-1070 repetir to be ement. morter mixer did not have a property functioning kill switch and the guarding was suspect, why did the above happen? I. Because millerfalt mechanics were not instructed thru their fraining to visually inspect or test that kill switch prior to using the equipment. Why did the above happen? I. Because a written procedure or standard was	(1) What happened? At the SISO Flare Compressor K-1070 repair job cernent / morter mixer did not have a property functioning kill switch and the guarding was suspect. Why did the above happen? I. Because millwright mechanics were not instructed thut their training to visually inspect or lest this kill switch prior to using the equipment. Why did the above happen? 2. Because a written procedure or standard was never created to hispect the equipment prior to use. Side note for the guard being suspect on the machine: It was not in use and the guard being suspect on the machine. It was not in use and the guard gray was temporally removed. The indelent mentioned where a fatality occurred happened while the machine was nonting. This machine was not have and so the guard being off or removed was not a safety hexand.	(1) Test run prozedure did not specify who was responsible for pulling each sample because in the past did not include and no incident occurred. (2) PED did not include a step in the test run communication to notify PED when all samples collected because not in JLA.		(1) Inciden! — wrong size PRD 1. Why — ordered wrong size PRD 2. Why — Job walk in 2011 verified information on 705 and 707 form saying 1.5° 3004 flarge required, when in the field in I actually 1.5° 150# flarge 3. Why — 2011 job walks for PRDs were completed by various chavron mechanics (i.e. there wasn't a consistent (evel of knowledge). 2012 job walks are using the same personnel for all of the 2013 PRDs 4. Why — Lexc to consistency on walking PRD jobs for the PRDs due for compliance in the following year	

	42908	42886	42843	42829	42808	42806	42805	42803	42796	42795	42793	42790
	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA -	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery
	8/2/2012 9:00:00 AM	7/31/2012 9:00:00 PM	8/1/2012 3:30:00 PM	8/1/2012 10:00:00 AM	7/26/2012 7:30:00 AM	7/27/2012 9:00:00 AM	7/2//2012 3:00:00 PM	7/27/2012 1:45:00 PM	7/24/2012 10:30:00 AM	7/23/2012 9:00:00 AM	7/23/2012 7:00:00 AM	7/31/2012 8:30:00 AM
	Closed	Fact Gathering	Fact Gethering	Fact	Closed	Closed .	Closed	Closed	Closed	Closed	Clased	Fact Gathering
	Near Loss	Near Near	Loss	Loss	N Ber Loss	Loss	Loss Loss	Negr Loss	Neer Loss	Near	Near	Loss
	H2S Monitor Activation	Elevated ammonia reading in Hydro 60' sewer	Contract employee twisted ankle.	K-1080 Mp	Green Card. Release of air, air leak. Location: Inside CTR bidg	Green Card. Found hoses and cords in front of ladder, Location; #1 Powerhouse/#3 Boiler	Green Card, Uneven walking surface, tripping hazard, Location; Powerhouse	Green Card, Seen a contractor remove tools from other contractors equipment. Location: Powerhouse	Green Card. Fuel feek on burner, Location: D&R F550/560	Green Card. Steam leak overhead on 38 copper tubing needs to be fixed bacause hat condensate felling to wellkways. Location: RLOP 10' N of LV 11456	Green Cerd. Bad steam leak. Location: RLOP V- 1120	working on the job about the non functional start / libe non functional start / stop kill switch. The site foreman removed the equiplment out of service and a NLI was entered.
·	While cleaning up the area rear K-500, which had a leaking flange, workers H2S monitor activated.	On Tuesday (31 July) right Utility operation sampling Blo Intel found High NHJ present. Moving unstream to 13 sebarators: East & West, out all samp the NH3 needing was above 80 FPM. All contributors (FCCAlky, SRU and RLOP) were asked to creak their system (sewer flowing to 13 Sep) for possible product containing NH3.	Employee twisted envise while walking in area where rook crushing equipment was be being shut down for the day.	At 09:30 cm the OWS-2 board opacter received the High twyl starm on V- 10S1 the hier stape knodout on the Heat Gas compressors. The area operator was sent out to investigate the high level. Normal level control was not working, operations was in the crocess of bypassing the V-051 level was attempted whose but did not start due to the High level shutdown stiff, a fairm. Level control was placed and caused a Shutdown of K- 10S2 K-16G0 restart was attempted whose but did not start due to the High level shutdown stiff in dafam. Level control was bypassed from V1051 to V-10S2 and cavel dropped immediately. K-1080 multi-lin controller would not allow a compressor restart for 1 hour effer the 2 crusuccessful restant elempts. RLOP_ALPY_FC_SISCO,NISO_Flares all tipped their folializers and pulled a sample. A Tille V-report was initiated and all 5 flare samples were sent to QCD. HES was informed.	Green Card. There is a release of air or some kind inside the front of CTR that operates all day. I have walked the area, but cannot pinpoint it. Location: CTR	Green Card. Found hoses and cords in front of tadder. Location: #1 Powerhouse/#3 Boiler	Green Card. Uneven walking surface. Tripping hazard. Location: Powerhouse	Green Card, I seen a contractor remove tools from other contractors equipment which would cause those contractors delay from coing their job. Localion: Powerfocuse	Green Card. While working on F-550 2nd deck on southside, we smelled a fuel gas tesk. We called Operation Steve and snooped burners on F-550 and found leak on burner No. 8. South tip #2, due to broken weld. Location: D&R F-50/550	Green Card. Overhead sleam leak on 3/8 copper lubing needs to be fixed because hot condensate falling to walkways. Location: RLOP 10' North of LV11450	Green Cerd. Bad steam leak cut to walkways and it's hard to see when working near the leak. Location: RLOP V-1120	Earlier this week at the Cracking and Hydro Operator Safety Meeting a discussion took place about a failaity on a content / mortar mixer. When the Fleid Safety Coordinator was riding their take by the SISO Flear K-1070 repair job he save a center! / mortar mixer. He nationed that it did not have a properly functioning kill switch and the guarding was suspect.
	NL-Injury/Ithness - Contractor Injury	NL-Operational Process/Procedures - Plant Run Out/Slow Down	lnjury/illness	Environmental	NL-injury/iliness - Confractor injury	NL-injuryilliness - Employee injury	NL-Injuryillinass - Contractor Injury	NL-Business Process - Business Interruption	NL-Environmental - Operational Leak	NL-injuryilliness -	NL-injurylliness - Contractor injury	NL-injuryilinesa - Employae injury
(1) Incident Description: On July 23rd operations received a MK-3 Multilin common trouble starm (95XA302) on those years of the common trouble starm (95XA302) on those years on the common trouble and found the display was not working on the protective relay. A work order was written to repair the display function on Monday July 23rd; on the morning of July 24th the work order was reviewed during			(1) 1. MNy - Olich't recognize uneven Surfece, 2. Why - Employee was musti-tasking, not focused and logging not waiting. 3, Why - Complexeny - Hazard and the risk of logging not recognized. 4. Why - Didn't have eyes on the task and had acted the same way in the past without impact or injury.	(1) Why did North yard flates trip telelizors and sample? North yard flates trippediotakers and sampled due to K-1060 Studdown, Why did K-1069 shuddown due to High fewel in V-1051, Why did a high fewel in V-1051 occur? High level in V-1051 occur? High level in V-1051 occur? High level was building and spiked High to tip fewel of 170%. Why was level building in V-1051 s burged to tip fewel of 170% in the form P-1051 is burged why Did V-1051 the did the distriction for the V-1051 is burged why Did V-1051 Shupe to high fewel into of 70%? Appears at the sine that the distriction from P-1051 is burged why Did V-1051 Shupe to high fewel into of 70%? redstermined at this time.								never coasted to inspect the equipment prior to use. Side note for the guard being suspect on the machine: It was not in use and the guarding was temporarily temoved: The incident meritimed while ye steakly occurred happened while the machine was northing. This machine was not in use and so the guard being off or removed was not a safety hazard.

	7	1		1	T	1		1	1	1	
	43099	43094	43094	43094	43094	43087	43087	13000	43000	42973	42910
Richmond,	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA - Refinery	Richmond, CA • Refinery	Richmond, CA · Refinery	Richmond, CA - Refinery	Richmond, CA - Rofinery	Richmond, CA - Rafinery	Richmond, CA -
7/25/2012	8/6/2012 0:35:00 PM	8/6/2012 5:30:00 FM	8/6/2012 6/30:00 PM	8/6/2012 5:30:00 FM	8/6/2012 5:30:00 PM	8/6/2012 6:37:00 AM	8/8/2012 6:37:00 AM	8/3/2012 12:00:00 AM	8/3/2012 12:00:00 AM	8/1/2012 12:00:00 PM	7/23/2012 12:00:00
	Fect Galhering	Fact Gathering	Fact Gathering	Fact Gathering	Fact Gathering	Fact Gathering	Fact Gathering	Fact Gathering	Fact Gathering	Closad	Fact
	Loss	Coss	Loss	Loss	Lass	Lass	Loss	Loss	Loss	Near	Cost
Green Card. Water leak in	Relief flow to FCC flare during Plank rate reductions in response to 4 CU shuldown.	4 Side Cut suction line plping leak	♣ Side Cut suction line piping leak	4 Side Cut suction line piping leak	4 Side Cut sucton line piping leak	Visible Flaring from FCC Flare	Visible Flaring from FCC	F-305 (B Cell) Pig Tail leak In vicinity of Tube B43 / 155	F-305 (B Cell) Pig Yali leak In vicinity of Tube B43 / 155	Almost took a penalty for late payment to CUPA	Loss of Protective Relay
	While rapidly posturing units due to loss of feed from 4 Chude until there was flow to relief which tripped the following flero compliance samplers; FCO flere, RLOP Flare and N. Isomax fleres.	The suction line to P-1149 had a leak on the line, the leak caught fire	The suction line to P-1149 had a leak on the line, the back cought fire	The suction line to P-1149 had a teak on the line, the bak caught fre	The suction line to P-1149 had a leak on the line, the leak cought fire	Early before shift change on 8/8/12, the FGR system began to baid pressure and high flow was expendenced at 6:37 a.m. The FCC Intainzer tripped and visible flating was defected from the FCC flate. Upon further investigation, the source appears to be coming from 8 plant and source lesting and PED are involved with locating the source. Further initial action also show a high DP in V-1050, thus Indicating a plugged or fautly demister pad	Early before stift change on 8/6/12, the FGR system began to build pressure and high flow was experienced at 6:31 a.m. The FCC latter tripped and visible flaring was deleted from the FCC Sare, Upon further investigation, the source appears to be ecoming from 8 plant and source testing and PED are invoked with locating the source. Further inflat action also show a high DP in V-1050, thus indicating a plugged or fauthy demister pad.	During strounds the S. Iso AOG Operator discovered what appeared to be a pig tail hak on F-205 (BC All) Inspections was called and confirmed a pig tail leak in the vibrility of burner B43 1/55. The recommendation was mede to pull natural gas feed on B cell and make preparations to prich whichever tubes are determined to be leaking.	During sit rounds the S. Iso AOA Operator discovered what appeared to be a pig tall teak on F-305 (BC ebit), Interpretation was called and confirmed a pig tall leak in the vicinity of tumer 843 / 155. The secommendation was made to pud natural gas feed on B ceil and make preparations to pirch whichever tubers are determined to be leaking.	Payment on Invoices due for ISO Permit Year 2011/12 and Unannounced Inspections Fee for Permit Year 2011/12 were deleyed and could have resulted in a penalty.	On July 23rd operations received a MK-3 Mullilln common trouble alarm. (95XA302) on Honeywell, the operatior investigated and found the display was not working on the protective relay.
	Environmental	ก่าหว่าให้กอรร	EquipmenVPreperty Demege	Loss of Conlakment	Fire/Explosion	NL-Environmental - Release	Environmental	Operational Process/Procedures	Equipment/Property Damage	NL-Business Process	KIL- Damage - Equipment Damage - Equipment
The second section of the second section of the second section of the second section of the second section sec	-		,							(11). These wasn't any followup of involces for epiproval to assure prompt payment. (2) No detailed process set for the processing and tracking of involces (3) Previous Stafey Analyst did not see value for this liem to be in class manual or covering; it in tumovest. (4) Followed a process that did not have addiquate tracking of the involce.	the Maintevance/Operellon morning meeting. The tack of display was identified as a possible condition of lose of the protective relay to the motor sond transformer. An investigation elemnihed that this relay had felled, the motor was shuddown and a spare relay was fixtuited. MK-3 am for approximately 18 hours without protection to the motor. This motor has a single protective relay that is programmed to alarm due to failure, not to tip. FIVE WHY'S 1, Why of a motor run for 18 hours without protection A: The WHY'S 1, Why did motor run for 18 hours without protection A: The WHY'S 1, Why did motor run for 18 aware of lose of motor protection due to a loss of the Mullin as possible. The COD alone of the Mullin as the Whillin Railer of the to be so if ridental power supply failing B. The COD alone for this failure of the relay. 3. Why did "1' happon" A. The complete failure of the relay. 3. Why did "2' happon" A. The repair strategy is mactive and a spare was not awailable. The COD table for this relay point was vague or incomplete 4. Why did "3' happon" A. The spare railey had bean used a faw weeks prior and the replicament railey had not been delivered. ROOT CAUSE(S): A. The Equipment was delemned. ROOT CAUSE(S): A. The Equipment was delemned. ROOT CAUSE(S): A mod area used appred scriegy and stock replacement philosopphy for tellay. 2 COD liable provided has/index lindows and seal was been as a family as a condition of the seal relation of the left in the left

1		_	-	_	_	_
NL-Lessons Learned	Green Card. End-of-shift RSI, lumover did not adequately describe flange leak incident that shut down K-400 requiring pulling feed from TKC. All that's evident from the lumover is that the feed rate and recovered oil raise were at zero - no explanation of why. Location: Hydroproceasing (K-400 in TKC)	Green Card. RSL turnover did not adequately describe flange leak incident, Location; Hydro (K-400 in TKC)	Fact Near Loss	8/2/2012 5:00:00 Fad AM Gat	Richmend, 8 CA - 5 Refinery A	43226
NL-Lassons Learned	Green Card. Me and the crew have been rating good housecleaning around P- 501 but we don't have a lot of time to cleen all the pumps in the area. We need a labor crew to help clean the area. Location: N. Isomax P-501	Green Card, Need good housedeaning in area. Location: NISO P-501	Fact Near Gathering Loss	8/1/2012 12:30:00 Fac PM Gat	Richmend, 8 CA - 1 Refinary P	43221
NL-Lessons Learned	Oresn Card. At the contradors yard there's a trailer across from SS storage area with the tallgate silvays open with no cones or barricade warning others of the hazards. Locallor: Contractors yard of Xylens St.	Green Card. Trailer with taligate always open. Location: Xylene Rd.	Neer Loss	7/31/2012 11:30:00 AM Closed	Richmend, 7 CA - 1 Refinary A	43219
NL-Lessons Learned	Green Gard. Drivor in a vehicle talking on a cell phane. Location: Channel St.		Near Loss	7/31/2012 2:00:00 PM Closed	Richmond, 7 CA 2 Reference P	43216
NL-Lessons Learned	Green Card. Contractor engineer wanted to take messurements in tank that other contractor sandbhated. Location: B&S TK1687	Green Card. Contractor wanted to take measurements in tank. Location: 8&S TK1667	Near Loss	7/31/2012 9:20:00 AM Clased	Richmond, 7 CA - 9 Refinery A	43215
NL-Lessons Learned	Green Card. As I was walking the Powerhouse for hazards after funch, I noticed a leak of the seam water coming from above at Boiler #1, Location: Powerhouse, #1 Boiler	Green Card. Leak of hot steam water. Location: Powerhouse, #1 Boiler	Near Loss	7/30/2012 12:40:00 PM Closed	Richmond, 7/30 CA - 12:5 Refinery PM	43214
NL-Lessons Learned	Grean Card. A driver was on a cell phone while driving, Localion: 91 Gate parking lot	Green Card. A driver using cell phone white driving. r Location: 91 Gate parking lot	Near Loss	7/30/2012 4:30:00 PM Closed	Richmond, 7 CA - 4 Refinery P	43212
NL-Lessons Learned	Green Card. Contractor tost his earplug. Location, Nisco/CWT	Green Card. Contractor lost his earplug. Location; Nisco/CW/T	Near Loss	7/25/2012 1:30:00 Closed	Richmond, 7 CA - 1 Refriery P	43209
NL-Lessons Learned	Green Card. Found serosol can in garbage Location: B&S 95 Tank Pad	Green Card. Found aerosol can in garbage. r Location: B&S 95 Tank Pad	Nosr Loss	7/24/2012 11:00:00 AM: Closed	Richmend, 7 CA - Refriery A	43207
NL-Lessons Learned	Green Card, Person driving too fast in parking lot Location: 91 Gate	Green Card. Person diMing too fast in parking lot. Location: 91 Gale	Near Loss	7/20/2012 4:40:00 Closed	Richmond, 7 CA - 4 Refinery F	43206
NL-Quality - Product Quality (Int)	Started moving TKN without complete lab results to a feed tank		Near Loss	8/7/2012 11:00:00 Pl/: Closed	d,	43181
NL-Business Process - Business Interruption	Breakers 115-732 and 115-832 @ SOSS ripped open due to failure of Relay. Cogen Line 2 was was isolated from SOSS. The Faulty relay was identified as the 8712-P-LCB 2 relay.	Cogen Line 2 isolated to SOSS due to faulty rela	Near Loss	8/7/2012 5,52.00 PM Closed	Richmend, 8/7/ CA - 5.5 Refinery PM	43186
iryluryilin <b>e</b> ss	INITIAL DESCRIPTION: SEE LINK ATTACHED IN INVESTIGATION FOR COMPLETE TOP REPORT. ON 87/2012, HERR AT THE RICHMOND REFINIERY, DAR WINSH PAD SITE, A CONITACTOR MACHINIST WAS PREPARING TO UNICAD A TANK MIXER GEARBOX WHICH WAS LOADED IN THE BACK BED OF THE MECHANICS TRUCK. APPARENTLY THE GEARBOX HAD ROLLED AGAINST THE BACK DOOR OF THE TRUCK THE GEARBOX ROLLED OUT. THE MECHANIC OPENED THE DOORS OF THE TRUCK, THE GEARBOX ROLLED OUT. THE MECHANIC PROBLED THE DOORS OF THE TRUCK, THE GEARBOX ROLLED OUT. THE MECHANIC PROBLED THE GEARBOX FROM FALLING, CALIGHT HIS HADD RETYRENT THE BACK BUMPER OF THE TRUCK AND THE GEARBOX, PINCHING HIS MIDDLE FINGER AND CREATING A GASH NEAR THE TOP FOLD OF HIS FINGER THE CUT RECURTED AND STITICHES AND IS CLASSIFED AS A FIRST AID.	PINCHED FINGER	investigation loss	8772012 2:30.00 inve	Richmond, B CA 2	43167
NL-Lessons Learned	Green Card. LPG railcar was parked up on top of chock, one of the wheels is of the tack, Location; Relifered by the Rod and Gun Gale		Near Loss	8/4/2012 3:00:00 Closed	Richmond, B CA - Refney F	43146
NL-Lessons Learned	Green Card. Water leak in pipe rack above P-105B is creeting slip hazard (sligue on 1001). Almost stipped zanying material. Lecation: FCC		Near Loss	7/25/2012 7,00:00 AM Closed	D	43143
NL-Injury/liness - Employee Injury	Green Card. Water leak in pipe reck above P-(058 is creating slip hazard (algae on floor). Almost slipped carrying material. Location: FCC	Green Card, Water teak in pipe rack above P-1058. Location: FCC		~	<u> </u>	43143
NL-injury/liness -	Green Card. Water leak in pipe rack above P-1058 is creating slip hazard (algae on floor). Almost elipped carrying material. Location: FCC	pipe rack above P-1058. Location: FCC	Near Loss	7:00:00 AM Closed	CA . 7	43143

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43230	43228	43227
Richmond, 8/7/2/ CA - 2:00: 43230 Refinery PM	Richmend, 847/2 CA - 2:30: 43228 Refinery PM	Richmond, 8/7/2012 CA - 1:30:00 43227 Refinery FM
85	Richmend, 877/2012 CA - 2:30:00 Refinery PM	. 8/7/2012 1:30:00 PM
Green Fact Near Local Gathering Loss Deck	7/2012 30:00 Fact M Gathering	Fact Gethering
Nea	Nes Los	
Green d line is n Locato	Green of debris of Plant K	Graen I surface Near Locatio Loss Deck
Green Card. Steam tracing line is not insulated. Location: 9 Plant K-900	Green Card, Tons of debris on deck, Location: 9 Plant K-900 Top Deck	Green Card. Slippery surfaces on deck. Near Location. 9 Plant, K-900 Loss Deck
Green Card Steam tracing line is not insulated.  Near Location: 9 Plant K-900   Plant K-900 Dock Loss Dock	Green Card Tons of .  Near debris on deck. Location: 9 Green Card. Tons of debris on dock. Could have stipped or tripped, Location: 9 Location: 9 Plant K-900 Top Deck.	Green Card. Slippery surfaces on deck. Location: 8 Plant, K-900 Deck
line is not insulated. Almo	on deck. Could have stp	as on deck. Location; 8 F
st got burned. Location: 9	ped or tripped. Location: 9	Yant, K-900 Dock
NL-Lossons Learned	NL-Lessons Learned	NL-Lessons Learned

Print Close

## IPS LI/NLI Search for Dates 7/1/2009 to 10/31/2010



LI - Abnormal Freight, LI - Abnormal Supply Occurrence, LI - Business Interruption, LI - Business Interruption/EVR-ISD, LI - Business Interruption/EVR-ISD, LI - Business Loss, LI - Community Inquiry, LI - Contractor Days Away From Work Case, LI - Contractor Frist Ald, LI - Free Explosion, LI - Nov - Air, LI - Nov - Water, LI - Non-Compliance Company Policy, LI - Non-Compliance Government Requirement, LI - Non-Industrial, LI - Non-Industrial, LI - Non-Contractor - MVC, LI - Preferred Contractor - MVC, LI - Preferred Contractor - Spil, LI - Product Contamination (Ext), LI - Product Quality (Ext), LI - Product Quality (Ext), LI - Product Quality (Int), LI -

			21				In case of the second state of the state of	I SVSI A				
	7/15/2010			ACTUAL LEVEL	POTENTIAL LEVEL	INCIDENT DESCRIPTION  Loss of non-Gil, Laptop computer form the I&E Training Center, bidg 520 Hensley Facility. Last seen	Richmond Refinery	Development Department Facility (Rich)	LEVE 3	LEVELA	LEVELS	LEVEL6
1984185	1/20/2010			Level 1	Level 1	Projector INFocus IN2102 orderd from "Projector People" January 13, 2010. Delivered to Lancaster L	Richmons Refinery	Development Department Facility (Rich)	<del> </del>			
1826653	10/14/2009			Level 1		Employee was experiencing discomfort in his right wrist while at his computer work station,	Richmond Refinery	Development Department Facility (RIch)	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	
1541615	7/7/2009			Level 2	Level 2	Worker was assisting in leading a piping manifold in to the back of a Matrix pickup truck, the load	Richmond Refinery	Development Department Facility (Rich)	ļ			<del> </del>
	10/1/2009			Level 1	Level 2		Richmond Refinery	Development Department Facility (Rich)	1		1	
	7/19/2010			Level 1	Level 1	Filness Center member pinched finger between a dumbbell and the dumbbell rack - which resulted in br	Richmond Refinery	Health Quest/Fitness Ctr/Conference Ctr Area				
	12/10/2009	ับเ	J - Criminal Activity	Level 1	Level 1	Laptop that the Faness Center Staff used for Health and Wellness Lecture delivery was taken out of	Richmona Refinery	Health Quest/Fitness Ctr/Conference Ctr Area				
	8/18/2009	LI I	J - Criminal Activity	Level 1		Safety On-Cail bag stolen from car located at 1444 Cloudview Drive, Pleasant Hill, CA, Bag contained	Richmond Refinery	Offsite				
1861987	3/11/2010		J - Contractor First Ald	Lovel 1		While EE was delivering equipment to Bacicle Fab he exted his vehicle he rolled his ankle	Richmond Refinery	Offsite				
1579471	3/25/2010		I - Businesa Process	Level 1		Business Plan Roll Out Feb 11 & 25, 2010	Richmond Refinery	Offsite	<u>                                     </u>			
	8/18/2010			No Level Selected		Railserve locomotive 201 derailed 2 axles (4 wheels) at approximately 2:30PM. The derailment occ	Richmond Refinery	Offsite				
	5/21/2010			Level 1		RTD Driver went Benicia Fabricating company to pick up two exchanger bundles, while in transport the	Richmond Refinery	Offsite				
7	5/28/2010		NLI - Equipment Damage	No Level Selected		Railserve locomotive 202 was shoving 4 empty cars down the runaround lead in the reilcar storage yer	Richmond Refinery Richmond Refinery	Offsite Purchasing & Materials Management				
	8/12/2009		J - Business Interruption	Level 1		Nell truck driver had a white powder substance in small quantity come out of a magazine and got on h  Empty propano odorani cylinder at the # 8 wharehouse was found to be leaking from the treads between	Richmond Refinery	Purchasing & Materials Management	<del> </del>			
	9/22/2009			Level 1	Level 1	Particle In Eye - On Wodnesday 11/11 at about 3:30pm worker was over at the 8 Warehouse spare parts	Richmond Refinery	Purchasing & Materials Management				
1715079	5/26/2010			Level 1	Level 1	Chevron Engery Solutions (subcontractor) installing a metrological. Wind Tower hit the ground as it	Richmond Refinery	Reclamation			<del>                                     </del>	
1722130	10/22/2009			No Lovel Selected	Level 1	Dumpster bins of excavated soil were stored temporarily on Refinery land leased to others without pr	Richmond Refinery	Reclamation				T
	3/12/2010		J - Spill	Level 1	Level 1	An estimated 20 - 25 gat, of transformer of apilled to soil in the reclamation yard. The transform	Richmond Refinery	Reclamation				
	11/7/2009	Li i	LI - Equipment Damage	Level 1	Level 2	At approximately 9:15 am white excavating for the installation of a new 18* & 6" HOPE line at gate 1	Richmond Refinery	Reclamation				
	5/30/2010	LI	LI - Equipment Damage	Level 1	Level 1	While loading into the EOD van at 53 Gate prior to the beginning of their shift, Operators noticed d	Richmond Refinery	Refinery General				
1851042	3/2/2010	Li i	LI - MVC - Contractor	Level 1	Level 1	The loss type of MVC-Contractor was selected, however, the person involved is a city of Richmond emp	Richmond Refinery	Refinery General	<u> </u>			
1619730	8/25/2009	1,1		Level 1	Level 2	TOP INVESTIGATION-H2S IN DIESEL-Samples from tank T-3195 were sent to the Quality Control Dept.for	Richmond Refinery	Refinery General				
1559412	7/21/2009	LI	LI - Non-kdustrial	Level 1	Level 2	Employee indicated that he has had weak knees over the last few months. He was taken to Concentra M	Richmond Refinery	Refinery General				
	8/12/2009	<u>u</u>	LI - Equipment Damage	Level 1	Leval 1	Goebel Paving was moving bin #251017 at Xylene and Ammonia Streets using back hoe and accidentally	Richmond Refinery	Refinery General Refinery General				
1967102	8/28/2010	LI I	LI - Security Incident	Level 1	Level 1	Loss/Near Loss and Roof Causes/Solutions information is considered security sensitive information an	Richmond Refinery Richmond Refinery	Refinery General				
1967102	5/28/2010 8/10/2009	U II	LI - General Liability LI - First Aid	Level 1 Level 1	Level 1	Loss/Near Loss and Root Causes/Solutions information is considered security sensitive information an Record keeping purpose only, no injury at this time - Heating shift.	Richmond Refinery	Refinery General	<del> </del>		<del></del>	
	8/13/2009	<del>- []</del>	LI - Safety Systems and Relief Devices	Level 1	Level 2	TOP INVESTIGATION-LOSS OF RADIO COMMUNICATION	Richmond Rafinery	Refinery General	<del> </del>	100		
1589377	8/13/2009		LI - Equipment Failure	Level 1	Level 2	TOP INVESTIGATION-LOSS OF RADIO COMMUNICATION	Richmond Refinery	Refinery General	<del> </del>			
1856394	3/8/2010		LI - Spill	Level 1	Level 1	5 Gallons of cit had spilled to the ground after a roll off truck driver had scraped the oil pan on	Richmond Refinery	Refinery General	1	1477		
	8/14/2009			No Level Selected		Upon discovering an air hak on his truck, the employee pulled into the Goebel Paving Compound to in	Richmond Refinery	Refinery General	T			
1982493	7/10/2010			No Lovel Selected	Level 1	Problems with the po-call system and gaps in guidance — there was some confusion and a delay in gett	Richmond Refinery	Refinery General				
1741659	11/24/2009	NLI	NU - Non Compliance - Air	No Level Selected	Level 1	Newly ordered feel gas dram H25 calibration gases arrived late than expected, A spare cylinder calib	Richmond Referery	Refinery General				
1719333	9/15/2009			No Level Selected	Level 1	In Sept 2009, the PSM team identified 15 PHA and City of Richmond Industrial Safety Ordinance (COR I	Richmond Refinery	Refinery General				
1916550	5/3/2010		NU - Non-Compliance Company Policy	No Level Selected	Level 1	Oriver of vehicle accelerated and ran a stop sign while making a right turn. This occured at the int	Richmord Refinery	Refinery General				
1916550	5/3/2010		NLI - Non Compliance	No Level Selected	Level 1	Driver of vehicle accelerated and ran a stop sign while making a right turn. This occurred at the int	Richmond Refinery	Refinery General	<u> </u>			
1854511	3/4/2010		NLI - MVC - Contractor	No Level Selected	Level 1	Miner MVC at scale house with a contractor truck driver who struck a yellow pole - this incident occ	Richmond Refinery	Refinery General				
1568186	3/16/2010		NLI - Non Compliance	No Level Selected	Level 1	A Contra Costa County Health Services Department's Audit finding :	Richmond Refinery	Refinery General Refinery General				
1868265	3/16/2010		NLI - Non Compliance	No Level Selected	Level 1	Contra Costa County Health Services Department's Audit findings for	Richmond Refinery	· · · · · · · · · · · · · · · · · · ·	<b></b>			
1895123	4/12/2010		NLI - Business Interruption NLI - Business Process	No Level Selected No Level Selected	Level 1	State officials from the Bay Area Quality Management District called around 09:20 to announce a rout State officials from the Bay Area Quality Management District called around 09:20 to announce a rout	Richmond Refinery	Refinery General	<u> </u>			
1895123	4/12/2010			No Level Selected	Level 3a	This NLI is entered to allow Richmond Refinery to track corrective actions as a result of the Manufa	Richmond Refinery	Refinery General				1
1542831	5/1/2010 3/25/2010			No Level Selected	Level 1	Incident Description:	Richmond Refinery	Refinery General				
1868227	3/16/2010		NLt - Non Compliance	No Lovel Selected	Level 1	Contra Costa County Health Services Department's Audit findings for Underground Storage Tank Act	Richmond Refinery	Refinery General				
1928743	5/17/2010		NU - Non Compliance - Air	No Level Selected	Level 2	N21- Title V requires a minimum seven day notifications to the BAAQMD prior to conducting Residue	Richmond Refinery	Refinery General				
1884177	3/29/2010		NLI - Contractor Injury	No Level Selected	Level 3b	This incident was reviewed as part of the Global Manufacturing Lessons Learned process, it was decid	Richmond Refinery	Refinery General				
1884177	3/29/2010		NLI - Employee lojury	No Level Selected	Level 3b	This incident was reviewed as part of the Global Manufacturing Lessons Learned process, it was decid	Richmond Refinery	Refinery Seneral				
1922997	4/15/2010		NLI - Lessons Learned	No Level Selected	Level 1	On April 15th an exceedance of the Cogen NOx limit occurred. HES needed to know the amount of exces	Richmond Refinery	Refinery General				
1619369	8/3/2009	Li	U - Business Process	Leval 1	Level 1	Less than 1 month prior to the Richmond RLOP turnament, the expected turnament duration was reduce	Richmond Refinery	Refinery General				
1555912	7/20/2009	u	LI - Equipment Damage	Level 1	Level 2	At 8:30AM on Monday morning, July 20, a delivery truck driver was delivering two columns to the Rene	Richmond Refinery	Refinery General				
1595411	8/17/2009	u	Li - Business Interruption	Lovel 1	Level 1	Rheniformer feed was reduced sooner than it needed to be to cut back H2 export for HNF catalyst redu	Richmond Refinery	Refinery General				
1614741	7/15/2009	LI .	LI - NSR Consent Decree	Level 1	Level 1	As required by the CD, a 3rd party audit on the refinery's LDAR program was conducted in July 2009.	Richmond Refinery	Refinery General				
1556309	7/17/2009	Ш	LI - MVC - Contractor	Lavel 1	Level 1	Contract EE driving a Chevron vehicle badged at 137 Gate the gate opened, the EE drove forward and t	Richmond Refinery	Refinery General				
1990059	7/27/2010		LI - Spill	Level 1	Level 1	Clean Harbors' reli-off truck spills approximately 3 gallens of diosel to asphalt covered soil at 85	Richmond Refinery	Refinery General				
1990059 1537862	7/27/2010		LI - Equipment Damage LI - Soil	Level 1 Level 1	Level 1	Clean Harbors' roll-off truck spiks approximately 3 gailons of deset to asphalt covered solf at 8S TOP INVESTIGATION-DESEL GAS ONTO STREET-CTR (Central Tool Room) was notified that a 100KW general		Refinery General Refinery General	<u> </u>			
1856894	3/3/2010		Li - MVC - Contractor	Level 1	Level 1	TOP INVESTIGATION—CONTRACTOR HIT POLE—While leaving the Project Trailer parking lot in their work	Richmond Refinery	Refinery General				
1628676	10/26/2009		LI - MVC - Company	Level 1	Leval 1	RTD driver was attempting to badge out of the Rod and Gun into the refinery. Upon the first attempt	Richmond Refinery	Red & Gun Club	· · · · · · · · · · · · · · · · · · ·			
1590602	6/12/2009		U - First Aid	Level 1	Level 1	Employee experienced shoulder discomfort.	Richmond Refinery	Technical Center / Cafeteria				
1786052	5/13/2010	U	U - First Aid	Level 1	Level 1	Employee's hand hit wall & edge of notice board while taking an organized stretch break. Slight cut	Richmond Refinery	Technical Carter / Cafeteria				****
1879359	3/24/2010	u	LI - First Aid	Level 1	Level 1	employee was washing a small seak knife his hand in the kitchen with a wash scrub. He was distracte	Richmond Refinery	Technical Center / Cafetoria				
1916494	5/3/2010	LI	LI - Contractor First Aid	Level 1	Level 2	Contractor engineer lost his footing and fell walking in the cafeteria parking lot, Plant protection	Richmond Refinery	Technical Center / Catelena				
1995698	7/29/2010		NU - Non Compliance	No Level Selected	Level 1	Nissed drain respections - During review of the semi-annual report due to the EPA for New Source Per	Richmond Refinery	Technical Carler / Cafeleria				
2039201	9/23/2010		NU - Business Process	No Level Selected	Level 1	Safety on-call bag was turned over by leaving the on-call bag in an office of a fear member that was	Richmond Refinery	Technical Center / Cafeleria				ļ
1595255	8/18/2009		Li - Non-Industrial	Level 1	Level 1	EE fall light headed while in the Tech Center, EE work to the clinic to be evaluated and it was deliver wrong way (one way street) on road behind Cafeteria.	Richmond Refinery Richmond Refinery	Technical Center / Cafeteria Technical Center / Cafeteria				
1546759 1602512	7/10/2009 8/24/2009		NLI - Non-Compliance Company Policy NLI - Business Internation	No Level Selected No Level Selected	Level 1	On the morning of August 24, a contract employee was attempting to teast a baget using a convection	Richmond Refinery	Technical Center / Caretera Technical Center / Cafeteria		**************************************	1	
	10/27/2009		NLI - Employee Injury	No Level Selected	Level 1	Caught my foot in in the cord attached to a USB flash drive. No injury or damage to the GiL comput	Richmond Refinery	Technical Center / Cafeteria			<del>                                      </del>	
1631228	10/27/2009		NLI - Equipment Damage	No Level Selected	Level 1	Caught my foot in in the cord attached to a USB flash drive. No injury or damage to the Gill, comput	Richmond Refinery	Technical Center / Cafeteria				
1667809	8/22/2009		NLI - Non-Compliance Company Policy	No Level Selected	Level 1	Trade Secret Protection Cmitted - A report was filled with an Agency without the proper labelling for	Richmond Refinery	Technical Center / Gafeterla	1			
1678536	10/8/2009		NLI - Business Interruption	No Level Selected	Level 1	Unable to review archived CVD's of Flare Video/Images. During an urgent mylew of the flam CVD's i	Richmond Refinery	Technical Center / Cafeteria				
1921251	5/5/2010	NLI	NLI - Non Cempliance	No Lavel Selected	Level 1	U Description:	Richmond Refinery	Technical Center / Cafeleria	<u> </u>			
1670188	10/8/2009	NLI		No Level Selected	Level t	FMP update - omission of information. The annual update of the Flare Minkritzation Plan was submitted	Richmond Refinery	Technical Center / Cafeteria				
1996849	8/3/2010		NLI - Business Process	No Level Selected	Level 1	HES OF metric reporting for 2Q 2010 was submitted after the noon deadline on Aug. 2, 2010. Final en	Richmond Refinery	Technical Center / Cafeteria				
1959496	6/28/2010		NU - Non Compliance - Air	No Lavel Selected	Level 1	Compliance plans have been developed for most Air Quality regulatory areas, but not all plans are co	Richmond Refinery	Technical Center / Cafeteria				
2000749	8/9/2010		NLI - Paperwork Incorrect/Not Sent	No Level Selected	Level 1	The action to correct the North Isomax N2 heider size in the Hazandous Material Business Plan / Chem	Richmond Refinery	Technical Center / Cafetena				
2000749	8/9/2010		NLI - Non Compliance	No Level Selected	Level 1	The action to correct the North Isomax NZ holder size in the Hazardous Material Business Plan / Chem	Richmond Refinery	Technical Center / Cafeteria				
2057299	10/26/2010		LI - MVC - Contractor	Level 1	Level 1	IMPACT Rekey Loss ID 1275	Richmond Refinery	Admin Building	<b> </b>			
1865443	2/28/2010		NU - Business Interruption	No Level Selected	Level 2	When the TKN/4Rhen/4H2S/H2B Train cluster shut down on 2/28/2010, there was not enough H2 available	Richmond Refinery	Admin Building				
2008327	8/1/2010		NLI - Incorrect Volume	No Level Selected	Level 1	A preliminary stock balance is created on the first work day of each month to help calculate estimat	Richmond Refinery Richmond Refinery	Admin Building Admin Building	<del> </del>			
1869719	2/12/2010		N.J Business Process	Level 1  No Level Selected	Level 1	Record keeping purpose only, no injury at this time - Worker Compensation request  A profirminary stock balance is created on the first work day of each month to help calculate estimat	Richmond Refinery	Admin Building	<del> </del>			
1657980	9/30/2009	LU	U - First Aid	Level 1	Level 2	Employee missed jast step when descending staks and fell resulting in a minor ankle sprain to left	Richmond Refinery	Admin Building	<del> </del>		<del>                                     </del>	
1697868	10/30/2009		NLI - Spil	No Level Selected	Level 3a	This entry is a Near Loss to allow for tracking of the Buncefield tank incident lessons learned acti	Richmond Refinery	Blending & Shipping (Rich)	B&S General (Rich)	B&S Admin Office	<del> </del>	
1766358	12/20/2009		LI - First Aid	Level 1	Level 1	EE had a spoom in his lower back white leaning over the water cooler. EE has pre-existing condition	Richmond Refinery	Blending & Shipping (Rich)	B&S General (Rich)	B&S Control House	<del>                                     </del>	
1925271	5/13/2010		NLs - General Liability	No Level Selected	Lavel 1	Contractor was afting 50 lbs backs of Soda Ash up a ladder to be emptied into a Poly Tank. The empt	Richmond Rollnery	Blending & Shipping (Rich)	8&S General (Rich)	B&S Control House	<del> </del>	
1898480	4/5/2010		INLI - Business Internation	No Level Selected	Level 1	Work to replace/reface kitchen cabinetry in the B&S control from commenced before CSR was created or	Richmond Refinery	Blending & Shipping (Rich)	B&S General (Rich)	88S Control House	†	
1780393	1/5/2010		LI - Equipment Damage	Level 1	Level 1	While lowering a manife, the manife came in contact with a parked truck. No one was in the parked	Richmood Refinery	Blending & Shipping (Rich)	B&S General (Rich)	9&5 Control House		
1725834	11/19/2009		LI - MVC - Company	Level 1	Level 1	While backing a company truck up in Borth#1 inorder to pull forward and leave the area, another comp	Richmond Refinery	Blending & Shipping (Rich)	Long Wharf (Rich)	Berlh 1		
1577380	8/3/2009		NLI - Contractor Injury	No Level Selected	Level 1	While working off of an approx 4' X4' wooden work platform that was hung off the front of the wharf	Richmond Refinery	Blending & Shipping (Rich)	Long Whart (Rich)	Berih 2		
1770436	12/23/2009		NLI - Spěl	No Level Selected	Level 2	Colorado Voyager crew members reported irredescent bubbles near the stern of the vessel. The bubble	Richmond Refinery	Blending & Shipping (Rich)	Long Whart (Rich)	Berin 2		
1950776	5/11/2010	u	11 - Equipment Failure	Lavel 1	Lavel 1	TOP INVESTIGATION-On June 11, 2010 at 19:30, the Wharf Head Operator (HO) notified the Shift Team L.	Richmond Refinery	Blending & Shipping (Rich)	Long Wharf (Rich)	Both 3		
1919471	5/5/2010	u	LI - Operational Leak	Level 2	Level 2	At 05:45 operator doing his hourly round. The Operator adjusted the yaper crane. He noticed the Hydra	Richmond Refinery	Blending & Shipping (Rich)	Long Wharf (Rich)	Benh 3		
2047666	10/20/2010	u	LI - Spill	Level 2	Level 2	REXEY IMPACT ID 688.	Richmond Refinery	Blending & Shipping (Rich)	Long Wharf (Rich)	Berth 3		1

AND DESCRIPTION OF THE PERSON NAMED IN COLUMN 1509	I LOSS TYPE	ACTUAL LEVEL POTENTIAL LE	/EL INCIDENT DESCRIPTION	LEVELI (	LEVEL2	LEVEL3	LEVEL4 LEVEL5 LEVEL6
1812605 2/2/2010 U	LI - Non-industrial	Level 1 Lavel 1	Illness: Security officer both 3 illness none industrial.	Richmond Refinery	Blending & Shipping (Rich)	Long Wharf (Rich)	Barth 3
1788751 1/15/2010 U	LI - Equipment Failure LI - Days Away From Work Case	Level 1 Level 2	At about 1425 hours on 1/15 the Mississippi Voy, docked at Berth #3 had a flame out on their (inen.  The long whan crew moored the Polar Adventure at Berth#4 at 6:45 PM July 25th, Both bow and stem h	Richmond Refinery Richmond Refinery	Blending & Shipping (Rich) Blending & Shipping (Rich)	Long Wharl (Rich)	Berth 3
1988501 7/25/2010 U 1626669 9/10/2009 U	Li - Days Away From Work Case	Level 2 Level 3b	TAFROOT While towing all spil boom with 25ft line schakle that was connected to the boom failed and	Richmond Refinery	Blending & Shipping (Rich)	Long Wharl (Rich)	Berth 4
1931586 5/70/2010 NLI	Nt.) - Release U Paperwork incorrect/not sem	No Level Selected Level 1 Level 1 Lovel 1	Odor detected off of the stem of the Orion Voyager in berth #4. Product discharge shut down and Che Ship arrived in Berth 4 without its pro-arrival information Form #1301 unaware once on site the corg	Richmond Retinery Richmond Refinery	Blending & Shipping (Rich) Blending & Shipping (Rich)	Long Wharf (Rich)	Berth 4 Berth 4
1973145 7/6/2010 U	LI - Business Interruption	Level 1 Level 1	Ship arrived in Berth 4 without its pre-arrival information Form #1301 unaware once on site the care	Richmond Refinery	Blending & Shipping (Rich)	Long Wharf (Rich)	Berth 4
2020970 9/2/2010 U	U-First Aid	Lavel 1 Level 1	The mechanic and co worker stated working on the berth 4 hydraulic cylinder install about 8 AM. Th  White using P-1 at the lab, to suck out the 1-8 gas line for maintenance a 2/4 " threaded line spru	Richmond Refinery Richmond Refinery	Blending & Shipping (Rich) Blending & Shipping (Rich)	Long Wharf (Rich) Long Wharf (Rich)	Berth 4 Berth, other berths
1657716 9/30/2009 LI 1688629 10/26/2009 LI	LI - Operational Leak LI - Contractor First Aid	(Level 1 Level 3a Level 1 Level 2	While moding a 3 part coating for rebar (Armatech) some of mix A splashed up and hit worker in the	Richmond Refinery	Blending & Shipping (Rich)	Long Wharf (Rich)	Berth, other berths
1577664 7/30/2009 LI	LI - Fîrst Aid	Level 1 Level 1	A Company Electricians was given a work order to remove old conduit from the side of the courseway at	Richmond Refinery	Blending & Shipping (Rich) Blending & Shipping (Rich)	Long Wharf (Rich) Long Wharf (Rich)	Barth, other barths Berth, other barths
1815127 2/4/2010 LI 1647403 9/25/2009 LI	LI - Equipment Damage LI - First Aid	Level 1 Level 1	DELIVERING RENTAL EQUIPMENT TO THE WHARF, DELIVERY TRUCK DID NOT HAVE A PUCK, TRUCK WAS White preparing for lunch a contract employee removed her spoggles and hardnat, She noticed an infit	Richmond Refinery	Blending & Shipping (Rich)	Long Wharf (Rich)	Berth, other barths
1917281 4/25/2010 LI	LI - Equipment Damage	Level 1 Level 1	White maneuvering along the causeway to fasilitate the electricians ( Newton ) to access the condui-	Richmond Refinery	Blending & Shipping (Rich)	Long Wharf (Rich) Long Wharf (Rich)	Berth, other berths
1908056 4/26/2010 III.3 2039806 9/28/2010 LI	NU - Lessons Learned	No Level Selected Level 1	Work boat copsized white (2) contractors were returning to the extraction point due to choppy water  Contract employed was performing traffic centrel duties on the Long Wharf causeway and was stung by	Richmond Refinery Richmond Refinery	Blending & Shipping (Rich) Blending & Shipping (Rich)	Long Wharf (Rich)	Borth, other berths  Borth, other berths
1803B81 1/24/2010 U	Li - Equipment Faiture	Level 1 Level 1	ERD was up and running to lemperature but it wasn't sending data to Honeywell, so after awhite of no	Richmond Refinery	Blending & Shipping (Rich)	Long Wharf (Rich)	Berth, other berths
1888937 3/17/2010 NU	NU - Equipment Damage UI - Contractor First Aid	No Level Selected Level 1 Level 1	Foundation anchor boits for Jib crane were bent during installation  Employee was using tin snipes to cut a piece of sheet metal, when small piece stuck him on the lower	Richmond Refinery Richmond Refinery	Blending & Shipping (Rich) Blending & Shipping (Rich)	Long Wharf (Rich) Long Wharf (Rich)	Berth, other berths
1212198 2/5/2010 U 1700815 11/2/2009 U	LI - Spill	Lovel 1 Level 1	09:00hrs-Contractor working at Vinari Lab pas area notified Whari Safety Operator of hydrocarbon odor	Richmond Refinery	Biending & Shipping (Rich)	Long Whart (Rich)	Berth, other berths
1723174 11/18/2009 U	LI - MVC - Confractor LI - Product Unavailable	Level 1 Level 1	When backing and turning out of a diagonal parking space next to the Wharf machine shop there was a The gasoil delivered on the Energy Champion had considerably higher chlorides (as high as 30 ppm as	Richmond Refinery Richmond Refinery	Blending & Shipping (Rich) Blending & Shipping (Rich)	Long Wharf (Rich)	Share Tanks
2002813 8/6/2010 U 1900635 4/19/2010 NLI	NU - Business Process	No Level Selected Level 1	-While one contract company was lifting (with rope by hand) a bundle of clamps, elbows and misc pipe	Richmond Refinery	Blending & Shipping (Rich)	Long Wharf (Rich)	Shore Tanks
2002813 8/5/2010 L1	LI - Product Quality (Ed)	Level 1	The gasoif delivered on the Energy Champion had considerably higher chlorides (as high as 30 ppm as	Richmond Refinery Richmond Refinery	Blending & Shipping (Rich) Blending & Shipping (Rich)	Long Wharf (Rich) Pump Stations (Rich)	Shore Tanks #1 Pump Station
1916085 5/3/2010 LI 1576291 8/2/2009 LI	U - Operational Lask	Lavel 1 Level 1	Vacuum truck spilled cutter out of its exhaust hose onto the asphalt at #1 pumpstation while working  While the SDA was flushing cutter down the 10 Ter line, operators found the mechanizal seal on P-2 h	Richmond Refinery	Blending & Shipping (Rich)	Pump Stations (Rich)	#1 Pump Station
1991370 7/28/2010 LI	L1 - Contractor First Ald	Level 1 Level 2	Vacuum truck driver was climbing imo the passenger side of the vacuum truck when his foot slipped o	Richmond Refinery	Blending & Shipping (Rich)	Pump Stations (Rich)	#1 Pump Station
1563920 7/26/2009 LI 1659678 10/1/2009 LI	LI - Operational Leak	Level 2 Level 3a	During 4 Crude S/D transition to 5 Tar line, the line was overpressured and blew a gasket at #1 pump CPS operator noticed a flange look on the 10-2 line at #1 pump station during his rounds. A blocky	Richmond Refinery Richmond Refinery	Blending & Shipping (Rich) Blending & Shipping (Rich)	Pump Stations (Rich) Pump Stations (Rich)	#1 Pump Station
1576291 8/2/2009 L1	LI - Equipment Falture	Level 1 Level 1	While the SDA was flushing cutter down the 10 Tar line, operators found the mechanical seal on P-2 h	Richmond Refinery	Blending & Shipping (Rich)	Pump Stations (Rich)	#1 Pump Station
1922813 5/11/2010 LI	LI - First Aid LI - Release	Level 1 Level 1	The 3072 drop line was being taken out of service for replacement of a speci required by an inspecti  On October 1, an A priority work order was written to clean the two screens on the Butane 111 line.	Richmond Refinery Richmond Refinery	Blending & Shipping (Rich) Blending & Shipping (Rich)	Pump Stations (Rich) Pump Stations (Rich)	#17 Pump Station #17 Pump Station
1659638 10/1/2009 U 1902330 4/20/2010 U	LI - Equipment Damage	Level 1 Level 2	The machinist was throwing wood into the back of his truck to take it to a dumpster. One of the pelic	Richmond Refinery	Blending & Shipping (Rich)	Pump Stations (Rich)	#21 Pump Station
1648233 9/27/2009 U	Li - First Aid Li - Operational Leak	Level 1 Level 1	TAB Operator experienced minor discomfort between shoulder blades white opening a 4" Gate valve at 2 TOP INVESTIGATION-21 PUMP STATION BAPL PSV LIFTED-T-3189 (RUL-Regular Unleaded Gasoline) was set	Richmond Refinery	Blending & Shipping (Rich) Blending & Shipping (Rich)	Pump Stations (Rich) Pump Stations (Rich)	#21 Pump Station
1963873 6/26/2010 LI 1540298 7/7/2009 LI	LI - Equipment Failure	Level 1 Level 2	TOP INVESTIGATION-P-2 TRANSFER INCIDENT-Toluene for an existion gos bland was being pumped from Y-	Richmond Refinery	Blending & Shipping (Rich)	Pump Stations (Rich)	#21 Pump Sletion
1540298 7/7/2009 LI	LI - Operational Leak	Level 1 Level 2	TOP INVESTIGATION-P-2 TRANSFER INCIDENT—Toluene for an axistion gas blend was being pumped from T- TOP INVESTIGATION-P-2 TRANSFER INCIDENT—Toluene for an axistion gas blend was being pumped from T-	Richmond Refinery Richmond Refinery	Blending & Shipping (Rich) Blending & Shipping (Rich)	Pump Stations (Rich) Pump Stations (Rich)	#21 Pump Station
1540398 7/7/2009 LI 2034390 9/22/2010 NLI	LI - First Aid NLI - Spill	Level 1 Level 2 No Level Selected Level 1	Leak coming out of the ground at P-2 discharge at 21 P/S. Leaking out of a crack in the concrete int	Richmond Refinery	Blending & Shipping (Rich)	Pump Stations (Rich)	#21 Pump Station
1889062 4/1/2010 LI	LI - Incorrect Product	Level 1 Level 1	Operator Incorrectly set RUL on KM 1(PUL) which should have been put on KM 2. Investigation reveale	Richmond Refinery	Blending & Shipping (Rich)	Pump Stations (Rich)	#21A Pump Station
1916503 5/3/2010 LI 1618678 9/2/2009 LI	LI - First Aid LI - Operational Leok	Level 1 Level 2	Two mechanics were installing a control valve at 24 pump stallon, One of the mechanics felt a sharp  OIL SPILL FROM LEAKING FLANGE	Richmond Refinery Richmond Refinery	Blending & Shipping (Rich) Blending & Shipping (Rich)	Pump Stations (Rich) Pump Stations (Rich)	#724 Pump Station
1618678 9/2/2009 LI	Li - Equipment Faiture	Level 1 Leval 1	OIL SPILL FROM LEAKING FLANGE	Richmond Refinery	Blanding & Shipping (Rich)	Pump Stations (Rich)	#7 Pump Station
1823583 2/12/2010 L1 1852456 4/6/2010 L1	LI - Business Process	Level 1 Level 1	NISMANIFOLD OF SHIPS DISCHARGE AT BOOSTER PUMP SPLITS TRN IMPORT TO TKG TANK TOP INVESTIGATION—TK 1434 CONDUCTIVITY IMPROVER ISSUES—On APRILIN, 2010, TK-1454 CONDUCTIVITY IMPROVER ISSUES—On APRILIN, 2010, TK-1454 CONDUCTIVITY IMPROVER ISSUES—ON APRILIN, 2010, TK-1454 CONDUCTIVITY IMPROVER ISSUES—ON APRILING.	Richmond Refinery m Richmond Refinery	Blending & Shipping (Rich) Blending & Shipping (Rich)	Pump Stations (Rich) Pump Stations (Rich)	F7 Pump Station F7 Pump Station
1892456 4/6/2010 LI 2034241 9/22/2010 LI	LI - MVC - Contractor	Level 1 Level 1	The second concrete truck of the day had gone through Gate 91 and was waiting outside the first TWIC	Richmond Refinery	Blending & Shipping (Rich)	Pump Stations (Rich)	#7 Pump Station
1650815 9/28/2009 LI	LI - Release	Level 1 Level 1	TOP INVESTIGATION—LINE LEAK AT 7 PUMP STATION  TOP INVESTIGATION—Employee Sustains Second Degree Burns—Three employees were commissioning a newly	Richmond Refinery Richmond Refinery	Blending & Shipping (Rich) Blending & Shipping (Rich)	Pump Stations (Rich) Pump Stations (Rich)	#7 Pump Station
1596358 8/18/2009 LI 1595472 8/18/2009 LI	Lt - First Aid Lt - Operational Loak	Lével 1 Level 1	Employee while making rounds found a bad leak on 1506 tank mixer. Employee was able to shutdown mix	Richmond Refinery	Blending & Shipping (Rich)	Pumo Stations (Rich)	#7 Pump Station
1595472 · 8/18/2009 LI	L1 - Equipment Failure	Level 1 Level 1	Employee while making rounds found a bad leak on 1506 tank mixer. Employee was able to shutdown mix	Richmons Refinery Richmond Refinery	Blending & Shipping (Rich)	Pump Stations (Rich) Pump Stations (Rich)	#7 Pump Station
1556455 9/2/2009 LI 1562412 7/23/2009 LI	Li - First Aid Li - Confractor First Aid	Level 1 Level 1	While performing operating task at 7 pump station employee was stung by a bee. He intracticately report  Contract employee finished his job and was carrying his tool bag down a flight of stairs. When he co	Richmond Refinery	Blending & Shipping (Rich) Blending & Shipping (Rich)	Pump Stations (Rich)	#8 Pump Station
1568437 7/28/2009 NLI	NU - Equipment Damage	No Level Selected Level 2	Crew was in the process of removing an old electrical switch gear from the 8 pump station area. The	Richmond Refinery	Blending & Shipping (Rich)	Pump Stations (Rich)	#8 Pump Station
1568437 7/28/2009 NU 1591059 6/14/2009 U	NU - Contractor Injury	No Level Selected Level 2 Level 1 Level 1	Crow was in the process of removing an old electrical switch gear from the 8 pump station area. The A new sampling system is being installed at the crude injection pumps at 6 pump station. When the op	Richmond Refinery Richmond Refinery	Blending & Shipping (Rich) Blending & Shipping (Rich)	Pump Stations (Rich) Pump Stations (Rich)	#8 Pump Station #8 Pump Station
1999964 8/9/2010 11	Li - Operational Leak	Level 1 Level 1	At 0600 a flange leak was found on the discharge line from the RUL gasoline tank T-5 to the truck ra	Richmond Referery	Blending & Shipping (Rich)	Transfer & Blending (Flich)	Leading Racks
1810760 1/28/2010 NU		No Level Selected Level 1 Level 1 Level 1 Level 1	A bolt was not light on a flange just upstream of the pump P-2801, The line was in service for a yea  TOP INVESTIGATION-PRESSURE RELIEF DEVICE PT-113 FAILURE-Pressure Relief Device, PRD TT-113, faile	Richmond Refinery	Blending & Shipping (Rich) Blending & Shipping (Rich)	Transfer & Blending (Rich) Transfer & Blending (Rich)	Loading Racks Loading Racks
1893063 4/8/2010 U 2014062 4/1/2010 U	Li - Operational Leak Li - Equipment Falture	Level 2 Level 2	P-5 is a water draw pump for T-3071, T-1587, T-1688, T-990, T-991, and T-992 that pumps to slop oil	Richmond Refinery	Blending & Shipping (Rich)	Transfer & Blending (Rich)	Main Tank Field
1881650 10/10/2009 NLJ	NLI - Lessons Learned	No Level Selected Lavel 2	Y-3213 (not was reported to be cacked 5" to one side. Subsequent inspection showed water in the pon	Richmond Refinery Richmond Refinery	Blending & Shipping (Rich)	Transfer & Blending (Rich) Transfer & Blending (Rich)	Main Tank Field
1707560 11/5/2009 U 1566679 10/7/2009 U	LI - Plant Run Out/Slow Down LI - Equipment Failure	Level 1 Level 1	T-3214 AVGAS PRODUCT UNAVAILABLE TO THE TRUCK RACKS.  Leak on fresh water line which supplies the poly tank that feeds the comparator motors. This fresh w	Richmond Refinery	Blending & Shipping (Rich) Blending & Shipping (Rich)	Transfer & Blending (Rich)	Main Tank Field
1861221 2/25/2010 LI	L1 - Contractor First Aid	Level 1 Level 1	2 contrators where clearing line breaks for welding on 9 locations in main Tank Fleid, this area is	Richmond Refinery	Blending & Shipping (Rich)	Transfer & Blending (Rich)	Main Tank Field
1752416 12/8/2009 L1 1625211 9/9/2009 L1	LI - Equipment Damage	Level 1 Level 1	Roof beam was bent when operator of crane appSed excessive tension on beam  EE stung by bee or veilow facket while working at T-3134. Was seen by Clinic and returned to work w	Richmond Refinery Richmond Refinery	Blending & Shipping (Rich) Blending & Shipping (Rich)	Transfer & Blending (Rich) Transfer & Blending (Rich)	Main Tank Field  Main Tank Field
1965180 6/26/2010 LL	Li - Product Quality (Int)	Level 2 Level 2	T-3185 finaled eff-test with the end point on the bottom at 575 F verse the maximum specification of	Richmond Refinery	Blanding & Shipping (Rich)	Transfer & Blending (Rich)	Main Tank Field
1816289 2/5/2010 U	U - Fire/Explosion	Level 1 Level 2	TOP INVESTIGATION-T3074 FOAM SEAL FIRE-On February 5th, 2010, at tank T-3074, an "incidient" stage  Jet production was inadvertently switched "Off-Test" to T-1518 @ 2255/Hrs.	Richmond Refinery Richmond Refinery	Blanding & Shipping (Rich) Blanding & Shipping (Rich)	Transfer & Blending (Rich) Transfer & Blending (Rich)	Main Yank Fold Main Tank Fold
2011452 8/23/2010 LI 1594899 8/18/2009 LI	Li - Product Quality (Int) Li - Equipment Damage	Level 1 Level 1	A Stargeon employee was transporting four empty 55 gallon drums from T3105 using a pickup truck, one	Richmond Refinery	Blending & Shipping (Rich)	Transfer & Blending (Rich)	Main Tank Field
1789128 1/16/2010 U	LI-Spill	Level 2 Level 2	AVGAS SPILL TO LAND - On Monday, January 11th, work to modify the existing Avgas water draw line beg	Richmond Refinery Richmond Refinery	Blanding & Shipping (Rich) Blanding & Shipping (Rich)	Transfer & Blending (Rich) Transfer & Blending (Rich)	Main Tank Field  Main Tank Field
1831718 2/19/2010 LI 1534348 9/16/2009 LI	LI - First Ald LI - Equipment Failure	Level 1 Level 1 Level 3a Level 3a	Employee felt a sharp pain in the upper back while closing a valve at 3214 tank. Empolyee reported UNSCHEDULED SHUTDOWN OF \$1451 DUE TO LEAKS.	Richmond Refinery	Blending & Shipping (Rich)	Transfer & Blending (Rich)	Main Tank Field
1922957 5/11/2010 U	Li - First Aki	Level 1 Level 2	Company employee injured left lodex finger while sliding a pin into the counterveight of a 100 ton c	Richmond Refinery	Blending & Shipping (Rich)	Transfer & Blending (Rich) Transfer & Blending (Rich)	Main Tank Field Main Tank Field
1583447 8/24/2009 LI 1815286 2/5/2010 LI	L1 - Operational Leak L1 - MVC - Company	Level 1 Level 1 Level 1 Level 1	HYDRIOCAR8ON LEAK DUE TO EXTERNAL CORRSION.  While feaving the T3078 parking area, the operator was performing a three point lum and backed into	Richmond Refinery Richmond Refinery	Blending & Shipping (Rich) Blending & Shipping (Rich)	Transfer & Blending (Rich)	Main Tank Field
1543559 9/23/2009 NL	NLI - Operational Loak	No Level Selected Level 1	HYDROCARBON LEAK DUE TO EXTERNAL CORROSION	Richmond Refinery	Blending & Shipping (Rich)	Transfer & Blending (Rich)	Main Tank Field
1826371 2/11/2010 NL 1670756 10/12/2009 NL		No Level Selected Level 1 No Level Selected Level 1	TOP INVESTIGATION-Wrong Dye Put in T-1074—Chevron Tank Engineer sent an email to a Contract Tank to White delivering tank cleaning gear to Tank 3074 jobsite, the rear passenger side bumper of a contract.	Richmond Refinery Richmond Refinery	Blending & Shipping (Rich) Blending & Shipping (Rich)	Transfer & Blending (Rich) Transfer & Blending (Rich)	Main Tank Field Main Tank Field
1670756 [0/12/2009 NL 1707560 [1/5/2009 LJ	Li - Product Unavailable	Lavel 1 Lavel 1	T-3214 AVGAS PRODUCT UNAVAILABLE TO THE TRUCK RACKS.	Richmond Refinery	Blending & Shipping (Rich)	Transfer & Blending (Rich)	Main Tank Field
1839458 2/22/2010 日	Li - Contractor First Aid	Level 1 Level 1	Surveyor was exposed to poisonoak on Ridge road when he was staking tence line. Surveyor was seen - The 8" Petrolite Line from 8 PS Clean Water Sump & 7 Basin developed a leak near old T-225 (oos) also	Richmond Ratinery Richmond Ratinery	Blending & Shipping (Rich) Blending & Shipping (Rich)	Transfer & Blending (Rich) Transfer & Blending (Rich)	Other (T&B) Other (T&B)
1541285 7/7/2009 LI 1717790 11/14/2009 LI	LI - Equipment Failure LI - Plant Run Out/Slow Down	Lavel 1 Level 1 Level 1 Level 1	Planned feed rate of 500 bph from T-3186 to RLOP is not being met.	Richmond Refinery	Blending & Shipping (Rich)	Transfer & Blending (Rich)	Other (T&B)
1750929 12/7/2009 LI	Li - Abnormal Supply Occurrance	Level 1 Level 1	On the week of 11/23/2009, the Oils Planning Group was advertising the Fuel Oil production at Richmo	Richmond Refinery	Blending & Shipping (Rich)	Transfer & Blanding (Rich)	Other (T&B)
1788674 1/15/2010 LI 1788674 1/15/2010 LI	L1 - Release L1 - Preferred Contractor - Spill	Level 1 Level 1 Level 1 Level 1	During the initial fit of the bive dye tote at the new Avgas loading rack, a flange leak was discov  During the initial fit of the bive dye tote at the new Avgas loading rack, a flange leak was discov	Richmond Refinery Richmond Refinery	Blending & Shipping (Rich) Blending & Shipping (Rich)	Transfer & Blending (Rich) Transfer & Blending (Rich)	Other (T&B)
1674324 10/13/2009 LI	LI - Equipment Failure	Lovel 1 Level 1	Comoc engine was schoduled two days down time to carbon blast. Started Monday Oct 12th and supposed	Richmond Refinery	Blending & Shipping (Rich)	Transfer & Blanding (Rich)	Other (T&B)
2010577 8/23/2010 LI	LI - Preferred Contractor - MVC LI - Business Interrupilon	Level 1 Level 1	An operator driving a pickup truck and a contractor driving a pickup truck collided. Chevron Emergen  YOP INVESTIGATION—TELIAVGAS SYSTEM SUCTION PROBLEMS—At the Ethyl Plant, lead (TEL B Aviation Mix	Richmond Refinery ) Richmond Refinery	Blending & Shipping (Rich) Blending & Shipping (Rich)	Transfer & Blending (Rich) Transfer & Blending (Rich)	Other (T&B) Other (T&B)
1807365 1/27/2010 U 1846330 2/28/2010 U		Level 1 Lavel 1	During the T-3074 TA the air compressor at the site stepped working. RSC was called to replace the co	Richmond Refinery	Blending & Shipping (Rich)	Transfer & Blending (Rich)	Other (T&B)
1539716 7/5/2009 UI	Li - Spil	Level 1 Level 1	12-3 WHF Line leak to secondary curtainment.	Richmond Refinery Richmond Refinery	Blending & Shipping (Rich)	Transfer & Blending (Rich) Transfer & Blending (Rich)	Other (T&B)
1539716 7/5/2009 U 2024899 9/9/2010 NL	LI - Business Loss NLI - Equipment Damage	Level 1   Level 1     No Level Selected   Level 1	12-3 WHF Line leak to secondary containment.  While officiating TEL at the TEL injection facility the operator noticed that the flexible hose which	Richmond Refinery	Blending & Shipping (Rich) Blending & Shipping (Rich)	Transfer & Blending (Rich) Transfer & Blending (Rich)	Other (T&B)
2029296 9/16/2010 NL	NU-Spil	No Level Selected Level 1	TOP REPORT-PIPE LEAK ONTO GROUND-A pipeline that had been Out of Service (abandoned) for approxima	Richmond Refinery	Blending & Shipping (Rich)	Transfer & Blending (Rich)	Other (748)
1709458 11/9/2009 NL	NLI - Contractor Injury	No Level Selected Level 2 No Level Selected Level 2	Crew set up to measure, cut and weld parts at the AV Gas TEL Facility. One of the welders started gr Crew set up to measure, cut and weld parts at the AV Gas TEL Facility. One of the welders started gr	Richmond Refinery Richmond Refinery	Blanding & Shipping (Rich) Blanding & Shipping (Rich)		Other (T&B) Other (T&B)
	NLI - Equipment Damage NLI - Fire/Explosion	No Level Selected Level 2  No Level Selected Level 2	Crew set up to measure, cut and wold parts at the Av Gas TEL Facility. One of the welders started gr	Richmond Refinery	Blending & Chipping (Rich)	Transfer & Biending (Righ)	Other (T&B)
1948705 5/9/2010 LI	LI- Spil	Level 1 Level 1	TOP INVESTIGATION—T-679 SAMPLE BOX OVERFLOW—On 6/8/10 an operator pulled samples from tank TK-67:		Blending & Shipping (Rich)	Transfer & Blending (Rich)	Petrolite Hilb
1670278 10/9/2009 NI	NLI - Sale Operating Limit (SOL) Exceeds	d No Level Selected Level 1	TOP INVESTIGATION-TX-3159 LOW TEMPERATURET-3159 is the Richmond Lube Oil Plant (RLOP) Heavy No	utr Richmond Refinery	Blending & Shipping (Rich)	Transfer & Blending (Rich)	Petrolite Hill
1797221 1/24/2010 U	LI - Product Unavalable	Level 1	7-3218 (HCO production tank) simest reached sale bit height because the 172 line was plugged. Y-32	Richmond Refinery	Blending & Shipping (Rich)		Potrolite Hill
1609568 8/27/2009 LI 1951086 6/13/2010 NI		No Level Selected Level 2	RECURRING LEAK ON ABONDONED HYDROCARBON PIPELINES. 17-3190 (Jet) was being sold on the BAPL. The 15 minute line sample revealed a 1% difference from the	Richmond Refinery Richmond Refinery	Blending & Shipping (Rich) Blending & Shipping (Rich)	Transfer & Blanding (Rich) Transfer & Blending (Rich)	Patrelite Hill Pipeline (BAPL, SPPL)
1951086   6/13/2010   NI 1946614   6/4/2010   LI		Level 1 Level 1	13133 had issues with conditions S/Haze. Ran out of reg carbob to sale and had to shut down Pipelin	Richmond Refinery	Blanding & Shipping (Rich)		Pipalina (BAPL, SPPL)
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CONTROL DATE OF FORM	LOSS TYPE		POTENTIAL LEVEL	INCIDENT DESCRIPTION	Richmont Refinery	LEVEL 2   Blending & Shipping (Rich)		Pole Yard Tank Field	LEVELS	
1548004 9/77/2009 Li	LI - Spill LI - Equipment Failure		Level 1	P-10 in 15 pump station blow a seal white gealing ready to flush the pump casing with lighter stock P-10 in 15 pump station blow a seal white gealing ready to flush the pump casing with lighter stock	Richmons Refinery	Blending & Shipping (Rich)		Pole Yard Tenk Field		
1648004 9/27/2009 LI 1871891 3/20/2010 LI	Li - Equipment Damage			While driving on Product Rd in the Pole Yard tank field the EE slowly drove over a 3" x 12" log. Th	Richmond Refinery	Blending & Shipping (Rich)		Pole Yard Tank Field		
1871891 3/20/2010 LI 1913326 4/29/2010 LI	LI - Operational Leak			Operator was making his rounds when discovered oil in one of the tank drains. He call his head oper	Richmond Refinery	Blending & Shipping (Rich)		Pole Yard Tank Field		
1811043 2/1/2010 U	LI - MVC - Company		Level 1	At approximately 20:00 on 2/1/2010 an operator was driving away from T-3220 and passed some brancha	Richmond Refinery	Blending & Shipping (Rich)		Pole Yard Tank Field	ļ	<del></del>
1705010 11/4/2009 U	LI - First Ald			Walking down steps to sample tank 3162, employee fail and scraped his knee. The employee had one ha	Richmend Refinery Richmend Refinery	Blending & Shipping (Rich)  Blending & Shipping (Rich)	Transfer & Blending (Rich) Transfer & Blending (Rich)	Pole Yard Tank Field Pole Yard Tank Field		
1729917 11/23/2009 111	U - Equipment Failure U - Contractor Medical Wo lost time			During a bi-annual Inspection of the roof seats on T-3197 the secondary seal was found to have a 40% Poison Oak - Contract Employee was performing pipe support inspections/evaluations no Feb 2nd & 3rd	Richmond Relinery	Blending & Shipping (Rich)	Transfer & Blanding (Rich)	Pole Yard Tank Field	· · · · · · · · · · · · · · · · · · ·	* *************************************
1834237 2/3/2010 LI	LI - Equipment Failure			RLOP, switched to a new blend by setting the first in product to the 471 line (off-test routing to T	Richmond Refinery	Blending & Shipping (Rich)		Pole Yard Tank Field		
1801869 1/26/2010 U 1675378 10/15/2009 U	LI - Equipment Damage			CB41 EE Moving Man Lift out of tank 3222 the man Lift came to close to the edge of the opening and	Richmond Refinery	Blending & Shipping (Rich)		Pole Yard Tank Field		
1623469 9/8/2009 LI	LI - Spill			TOP INVESTIGATION-CONTRACTORS SPRAYED WITH WATER/CRUDE OIL-While dismaniling the last 5 to 6	Richmond Refinery	Blending & Shipping (Rich)	Transfer & Blending (Rich)	Quany Tank Field		
1716568   1/13/2009 NLI	NU - Contractor Injury		<del></del>	During 11/12/09 worker left no discerment, After work commenter locked in a mirror and noticed redn	Richment Refinery	Blending & Shipping (Rich)	Transfer & Blending (Rich)	Quany Tank Field		
1643129 9/23/2009 U	LI - Spil	Level 1	1	An ABS hose connected to a guzzler vacuum truck breaks while in service guzzling tank bottom selids	Richmens Refinery Richmens Refinery	Blending & Shipping (Rich) Blending & Shipping (Rich)	Transfer & Blending (Rich) Transfer & Blending (Rich)	Quany Tank Field Quany Tank Field		
1650310 9/28/2009 LI	L1 - Spill			Vacuum truck spills ~10 gallons of crude oil/cutter mix to the soit at 3105 tank. While vacuuming a While gauging portable frac tank at T3105 contractor employee reported not feeling welf, possible he	Richment Refinery	Blending & Shipping (Rich)	Transfer & Blending (Rich)	Quany Tank Field		
1618398 9/2/2009 LL	LI - Contractor First Aid			4 I/2" brass rainfor rent valve bonnet separated from valve body and went aprox 10" up in the air.	Richmond Refinery	Blending & Shipping (Rich)	Transfer & Blending (Rich)	Quarry Tank Field		
1554105 7/17/2009 LI 1673526 10/14/2009 LI	Li - Contractor First Aid		Lavel 1	Employee was gelling his hose back from tank 3105; about eight lengths were strong together. He put	Richmond Refinery	Blending & Shipping (Rich)	Transfer & Blending (Rich)	Quany Tank Field		
1784111 1/(1/2010 LI	U - Release			The initial fill of Y3105 started on Jan 10, 2010 0800H with an Initial flow of 1,000 BPH crude oil	Richmond Refinery	Blending & Shipping (Rich)		Quarry Tank Field		
1580430 8/5/2009 LI	LI - Spill	Level 1	Leval 2	At T3105 processing site a centrate catch tank was everified. Less than half a barrel was spilled t	Richmond Refinery	Blending & Shipping (Rich)	Transfer & Blending (Rich)	Quarry Tank Field		
1580858 8/5/2009 U	Li - Spili		Level 2	TAPROOTwhile cleaning out a portable Frac tank the end hatches were open. The tank is fied into comm	Richmond Refinery	Blending & Shipping (Rich)		Quarry Tank Field		
1625422 9/9/2009 LI	LI - Contractor First Ald			While exiting a van from the drivers seat the PPS employee hooked his foot on exposed wires causing	Richmond Refinery Richmond Refinery	Blending & Shipping (Rich) Blending & Shipping (Rich)		Quarry Tank Field Quarry Tank Field	<u> </u>	
1832109 2/20/2010 1	Li - Product Unavailable			At approximately C0:32hrs 4 Chuse unit reported a spike in the AGAR probe (7.1%) indicating water in At approximately C0:32hrs 4 Chuse unit reported a spike in the AGAR probe (7.1%) indicating water in	Richmend Refinery	Blending & Shipping (Rich)		Quarry Tank Field		
1745437 112/3/2009 NLI	Li - Business Interruption NLI - Spili			SPILL TO DIRT WATER AND TRACE AMOUNT OF OIL.	Richmond Refinery	Blending & Shipping (Rich)		Quarry Tank Field		
1745437   12/3/2009 NU 1745437   12/3/2009 NU	NU - Water			SPILL TO DIRT WATER AND TRACE AMOUNT OF OIL.	Richmend Ratinary	Blending & Shipping (Rich)		Quany Tank Field	i''	
1788202 1/15/2010 U	LI - Equipment Failure		Level 1	TOP INVESTIGATION-VALVE ISSUES ON 3105TK SAMPLING BOX-An Oper, was sprayed white putting a sample f	Richmond Relinery	Blending & Shipping (Rich)	Transfer & Blending (Rich)	Quarry Tank Field		
1831929 2/19/2010 U	LI - First Aid	Level 1		Plant Protection EE was ascending a set of wooden stairs enroute to sign a hotwork permit. One of t	Richmond Refinery	Blending & Shipping (Rich)		SP Hill Tank Field		
1963676 6/25/2010 LL	LI - Product Quality (Int)	Level 1	Level 1	Approximately 7,500bbls of T-3163 (100N) was transferred to the Richmond Lube Plant (RLP) prior to a	Richmond Refinery	Blending & Shipping (Rich)		SP Hill Tenk Field		
1739627 11/24/2009 U	Li - Contractor First Aid		Level 2	TOP INVESTIGATION-POLE STRIKES CONTRACTOR-On Nev 24, 2003 an electrical contractor foremen and cre-		Blanding & Shipping (Rich)	Transfer & Blending (Rich) Transfer & Blending (Rich)	SP Hill Tank Field	<del>         </del>	
1929048 5/18/2010 LI	Li - Non-Industrial		Level 1	EE felt III. Transported to hospital for evaluation.	Richmend Refinery	Blending & Shipping (Rich) Blending & Shipping (Rich)	Transfer & Blending (Rich) Transfer & Blending (Rich)			
1762488 12/14/2009 LI	LI - Product Unavallable LI - Business (aterrupsion		Level 1	T-1292 diesel tank mixer was found omning on 1st rounds after tank had been finaled with Certificate T-1688 gravity could not meet the lank set at ,5 difference between top and bottom. Tank was sche	Richmond Refinery	Blending & Shipping (Rich)		SP Hill Tank Field	<u> </u>	
1926672 5/16/2010 LI	LI - Business Interrupean			Cotract company was dismantling fudure inside of tank with turch, A small pocket of product was tra	Richmond Rollnery	Blending & Shipping (Rich)	Transfer & Blending (Rich)			
1573611 7/30/2009 LI 1/95080 1/21/2010 LI	U - Non-Compliance Government		Level 1	Potential Title V deviation: ACIG inspections were missed on TK-3189 Mixer sent. Our initial inves	Richmond Relinery	Blending & Shipping (Rich)	Transfer & Blending (Rich)	SP Hill Tank Field		
1,23000	Requirement									
1996001 8/2/2010 LI	U - Spill			T-1966 sample system's drop line to the loading racks tank was found leaking to the soil. A bucket	Richmend Refinery	Blending & Shipping (Rich)	F	SP Hill Tank Field	<u> </u>	
1592798 5/10/2009 LI	LI - Preduct Contemination (Ext)		Level 1	Write loading 500R lube oil on a vessel it was discovered that slight traces of water was discovered	Richmond Refinery	Blending & Shipping (Rich) Capital Projects	Vessels (Rich) 214 Main	Other Vessels	ļ	
1643664 9/23/2009 NLI	NLI - General Liability		Level 1	Contractor office ee was wearing high heels on a planked board surface and so slepped into crack be	Richmond Refinery Richmond Refinery	Capital Projects	214 Main 214 Main	****		<u> </u>
1541198 7///2009 U	LI - MVC - Contractor	Level 1 Level 1	Level 1 Level 2	Contract safety operator was driving the safety operator truck from the FLUOR tent (#5 aspholt plant  A Fluor-contracted bus (#6601) scraped the front right humber area of a parked, Fluor-Leased pickup	Richmond Refinery	Capital Projects	Other			
1598270 8/20/2009 LI 1926385 5/12/2010 LI	LI - NVC - Contractor			Two (Timec) contractor employees lifting a 8° pipe 7.5 ft. long into the bod of a pick-up track. The	Richmond Refinery	Capital Projects	Other			
1729904 11/23/2009 LI	Li - Contractor First Ald		Level 1	While cleaning up at the end of the day the worker was putting away a ladder and checking out the wo	Richmend Refinery	Capital Projects	Other			
1904239 4/20/2010 U	LI - MVC - Personal Use		Level 1	Upon departing work in Company parking let, EE was backing personal vehicle out of parking location	Richmond Refinery	Capital Projects	Other			
1884347 12/31/2009 L1	LI - Business Process			The local capital budget (individual projects <52 MM) is a component of the overall line flore (>52 M	Richmond Refinery	Capital Projects	Other			
2035444 9/23/2010 LI	Li - Contractor First Aki	Level 1	Level 1	Contractor employee was walking inside trailer /building on her way home for the day, She felt a pa	Richmond Refinery	Capital Projects	Other Consult (Dist)	Secretion has Goding Contra	<u> </u>	
1932615 5/21/2010 LI	Li - Non-Industrial		Level 1	Employee reported to STL office and requested to be seen by EMT's. Employee stated they started to !	Richmond Refinery Richmond Refinery	Cracking (Rich) Cracking (Rich)	Cracking General (Rich) Cracking General (Rich)	Cracking Area Control Center Other (CASU)		
1547624 7/13/2009 LI	LI - First Aid	Level 1	Level 1	EE was working at the north yard weld bay. While lifting a valve and pipe. EE fet small sharp pa	Richmend Refinery	Cracking (Rich)	Crecking General (Rich)	Other (CABU)	!	
1842405 2/23/2010 U	LI - Business Interruption	Level 1	Level 1	On 2/20/10, the refinery experienced a power dip from Subrante Line 1 line going to the open positio Cracking Area Lab	Richmond Refinery	Cracking (Rich)	Cracking General (Rich)	Other (CABU)	1	
1623578 9/8/2009 LI 1695109 10/5/2009 NU	LL - Abnormal Freight NU - Paperwork incorrect/Not Sent		Level 1	CVX electrical crew performed the light installation and receptacle modifications at the Cracking La	Richmond Refinery	Cracking (Rich)	Cracking General (Rich)	Other (CABU)		
1972680 7/4/2010 LI	Li - Equipment Damage	Level 1	Lavel 1	Railserve locametive 201 was heading to track 209 to get a milicar being spetted to the LPG racks fo	Richmond Refinery	Cracking (Rich)	Cracking General (Rich)	Other (CABU)		
1851531 3/2/2010 NLL	NU - Permit Exceedance	No Level Selected	Level 1	The V-475 ruel gas drum H2S Z4 hour average almost reached it's environmental limit of 50 ppm. Sinc	Richmond Refinery	Cracking (Rich)	FCC (Rich)	#3H2S		
1660507 10/2/2009 LI	LI - Pennit Exceedance	Level 1	Level 1	The level in the DEA Reactivator, C-220, dropped off from 62% down to 12%. With the loss of DEA in	Richmond Refinery	Cracking (Rich)	FCC (Rich)	#3H2S		
1890513 4/5/2010 LI	Lt - First Aid	Level 1		While checking P-261 for a VOC seal leak, an operator was sprayed with water used as seal flush for	Richmond Refinery	Cracking (Rich)	FCC (Rich)	Caustic Treating		
1970299 6/30/2010 LI	LI - Equipment Failure	Level (	Level 1	The electrical crew performed a project to relocate MP-711, the FCC Cooking Water Pump, from TX-146	Richmend Refinery Richmend Refinery	Cracking (Rich) Cracking (Rich)	FCC (Rich) FCC (Rich)	FCC/SRU CWT		
1579278 7/27/2009 U	LI - Equipment Failure	Level 1	Level 1	During the commissioning of the TX-116/117 Power Centrol Center a component known as Microversa trip  The electrical crew performed a project to relocate MP-711, the FCC Cooling Water Pump, from TX-146	Richmond Refinery	Cracking (Rich)	FCC (Rich)	FCC/SRU CWT		
1970299 6/30/2010 LI	L1 - Business Interruption L1 - Plant Run Out/Glow Down		Level 1	MP-133 - ONG VOC violation at coupling and seat, 1200 ppm, found in meming (am) by VOC inspector, V	Richmond Refinery	Cracking (Rich)	FGC (Rich)	HORU	1	T=1
1673587 10/5/2009 LI	L1 - Contractor First Aid	Level 1	Level 1	While removing a blind on the suction flange of P-148A two contact EE's were sprayed with Gasoline/L.	Richmond Refinery	Cracking (Rich)	FCC (Rich)	NGRU		
2028312 9/15/2010 LI 1816148 1/31/2010 LI	LI - Equipment Damage	Level 1	Level 1	After several days of running P-112 to circulate recovered oil. The outside operator noticed it appe	Richmend Refinery	Cracking (Rich)	FCC (Rich)	NGRU		
1744468 11/30/2009 NLI		No Level Selected	Level 1	Employees walking by FCC pipe trench north of C-140 noticed some water flow into the trench that sho	Richmend Refinery	Cracking (Rich)	FCC (Rich)	NGRU		
2009304 8/21/2010 NLI		No Level Selected	Lavel 1	During start up E-142A (C-140 Doothanizer reboiler) steam safety filled to relief system. This volum	Richmond Refinery	Gracking (Rich)	FCC (Rich)	NGRU		
2009553 8/20/2010 NLI			Level 1	At approximately 9:30 pm on Aug 20, 2010 the field machinist discovered the case garket O.D for P-12				NGRU		
1959754 6/22/2010 NLI					Richmond Refinery	Cracking (Rich)	FCC (Rich)	11001		·•
1941933 5/31/2010 NLI		No Level Selected	Level 1	FCC V-133 wet gas compressor interstage vessel. While switching from P-133 to P-133A to LOTO P-133 f	Richmond Refinery	Cracking (Rich)	FCC (Rich)	NGRU		
1963102 8/17/2010 LI		No Level Selected No Level Selected	Level 1	During FCC start-up outside operators noticed a seal leak on P-123. Operators slopped the pump then	Richmond Refinery Richmond Refinery	Cracking (Rich) Cracking (Rich)	FCC (Rich) FCC (Rich)	NGRU		
	LI - Non-Compliance Company Policy	No Level Selected No Level Selected Level 1	Level 1 Lavel 1	During FCC start-up outside operators noticed a seal leak on P-123. Operators slopped the pump then Write doing rounds in the FCC an Operator noticed a contractor sharponing a tool with a grinder caus	Richmond Refinery	Cracking (Rich)	FCC (Rich)			
2015045 8/27/2010 LI	LI- Non-Compliance Company Policy LI- Notice of Violation	No Level Selected No Level Selected Level 1 Level 1	Level 1 Level 1 Level 1	During FGC start-up outside operators noticed a seal leak on P-123. Operators slopped the pump then Write doing mounts in the FGC an Operator noticed a contractor shappening a tool with a gindler caus Opacity meter failure on FGC stack. 1) Why did the opacity meter fail? The laser eye was not point	Richmond Refinery Richmond Refinery Richmond Refinery	Cracking (Rich) Cracking (Rich) Cracking (Rich)	FCC (Rich) FCC (Rich) FCC (Rich)	HGRU Other (FCC)		
1763882 12/14/2009 L1	LI- Non-Compliance Company Policy LI- Notice of Violation	No Level Selected No Level Selected Level 1	Level 1 Lavel 1	During FCC start-up outside operators noticed a seal leak on P-123. Operators alopped the pump then Write doing munds in the FCC an Operator noticed a contractor sharpening a tool with a grinder caus Opacity meter failure on FCC stack. 1) Why did the opacity meter fail? The laser eye was not point Losa of Signal from the FCC CEMS 302 Analyzer on Monday 12/14/09 9:00 PM, On Tuesday 12/15/09 The an The C-90 (Practionator) reflex control varior (52FC105) was partially bypassed for maintenance, the u	Richmond Refinery Richmend Refinery Richmend Refinery Richmond Refinery Richmond Refinery Richmond Refinery Richmond Refinery	Cracking (Rich)	FCC (Rich) FCC (Rich) FCC (Rich) FCC (Rich) FCC (Rich) FCC (Rich)	NGRU Other (FCC) Other (FCC) Other (FCC) Other (FCC)		
	Lt - Non-Compliance Company Policy Lt - Notice of Violation Lt - Equipment Failure	No Level Selected No Level Selected Level 1 Level 1 Level 1 Level 1 Level 1	Level 1 Level 1 Level 1 Level 1 Level 5 Level 3	During FGC start-up outside operators noticed a seal leak on P-123. Operators slopped the pump then White doing munds in the FCC an Operator noticed a contractor sharpening a tool with a grinder caus Opacity meter failtr on FCC stark. 1) Why did the opacity meter fail? The laser eye was not point Loss of Signal from the FCC CEMS SO2 Analyzer on Monday 12/14/09 1:00 PM. On Tuesday 12/15/09 The an The C-90 (fractionator) reflux control valve (S2FC105) was partially bypassed for maintenance, the u The C-90 (fractionator) reflux control valve (S2FC105) was partially bypassed for maintenance, the u	Richmond Refinery Richmend Refinery Richmend Refinery Richmond Refinery Richmond Refinery Richmond Refinery Richmond Refinery Richmend Refinery	Cracking (Rich)	FCC (Rich)	NGRU Other (FCC) Other (FCC) Other (FCC) Other (FCC) Other (FCC)		
1763882 12/14/2009 LI 1842963 2/25/2010 LI	LL - Nen-Compliance Company Policy LL - Netice of Violation LL - Exampment Failure LL - Ptant Run Out/Slow Down LL - Equipment/Unit Trip NLI - Business Internation	No Level Selected No Level Selected Level 1 Level 1 Level 1 Level 1 Level 1 Level 1 No Level Selected	Level 1 Lavel 1 Level 1 Level 5 Level 5 Level 1	During FCC start-up outside operators noticed a seal leak on P-123. Operators alopped the pump then White doing munds in the FCC an Operator noticed a contractor sharpening a tool with a grindler caus Operator noticed a contractor sharpening a tool with a grindler caus Operator noticed to the property of the property	Richmond Refinery Richmend Refinery Richmend Refinery Richmond Refinery Richmond Refinery Richmond Refinery Richmond Refinery Richmond Refinery Richmond Refinery	Cracking (Rich)	FCC (Rich)	NGRU Other (FCC)		
1763892 12/14/2009 L1 1842963 22/5/2010 L1 1842963 22/5/2010 L1 1842963 22/5/2010 NL1 1802720 1/27/2010 NL1 1810521 21/2010 NL1	LI - Nen-Compilance Company Policy LI - Notice of Violation LI - Equipment Failure LI - Plant Run Out/Slow Down LI - Equipment Unit Trip NLI - Business Interruption NLI - Health & Food	No Level Selected No Level Selected Level 1 Level 1 Level 1 Level 1 Level 1 Level 1 No Level Selected No Level Selected	Level 1 Level 1 Level 1 Level 5 Level 5 Level 1 Level 1 Level 1 Level 1	During FCC start-up outside operators noticed a seal leak on P-123. Operators alopped the pump then While doing munck in the FCC an Operator noticed a contractor sharpening a tool with a glindler caus Operator noticed a contractor sharpening a tool with a glindler caus Operator noticed as contractor sharpening a tool with a glindler caus Operator noticed as of signal from the FCC CEMS SOZ Analyzer on Monday 12/14/09 1:00 PM. On Tuesday 12/15/09 The an Tac C-90 (fractionator) reflick control valve (SZFC105) was partially bypassed for maintenance, the u The C-90 (fractionator) reflick control valve (SZFC105) was partially bypassed for maintenance, the u While switching pump TP-1184 notine for the spane pump not, the MCO gripper C-111 flow out was lost A BRAND EMPLOYEE CONSUMED SOME NOT SPIGEYCHICKEN WHOSE AND FREIS, FROM THE LUNCH	Richmond Refinery Richmend Refinery Richmend Refinery Richmend Refinery Richmond Refinery Richmond Refinery Richmond Refinery Richmend Refinery Richmend Refinery Richmend Refinery Richmend Refinery	Cracking (Rich)	FCC (Rich)	HGRU Other (FCC)		
1763882 12/14/2009 L1 1842163 225/2010 L1 1842953 225/2010 L1 1802720 1/12/7/2010 NL1 1810521 22/1/2010 NL1 1934325 5/13/2010 NL1	LL- Non-Complance Company Policy L1- Notice of Violation LL- Equipment Failure LL- Plant Run OutSlow Down LL- Equipment Unit Trip NLI - Gusiness Internation NLI - Health & Food NLI - Houth Complance - Air	No Level Selected No Level Selected Level 1 Level 1 Level 1 Level 1 Level 1 No Level Selected	Level 1 Level 1 Level 1 Level 1 Level 3 Level 3 Level 3 Level 1 Level 1 Level 1	During FCC start-up outside operators noticed a seal leak on P-123. Operators stopped the pump then White doing mounts in the FCC an Operator noticed a contractor sharpening a tool with a gender caus Opacity meter failure on FCC stack. 1) Why did the opacity meter fail The laser eye was not point Losa of Signal from the FCC CEMS SO2 Analyzer on Monday 12/14/09 1:00 PM. On Tuesday 12/15/09 The an The C-90 (fractionator) reflice control valve (22FC105) was partially bypassed for maintenance, the u The C-90 (fractionator) reflice control valve (22FC105) was partially bypassed for maintenance, the u White switching pump TP-118A online for the spans pump run, the MCO stripper C-111 flow cut was lost A BRAND EMPLOYEE CONSUMED SOME HOT SPICEYCHICKEN WINGS AND FRIES, FROM THE LUNCH THE FCC got pretty close to exceeding the ESP parametric limits on secondary current.	Richmond Refinery Richmend Refinery Richmend Refinery Richmend Refinery Richmond Refinery Richmond Refinery Richmond Refinery Richmend Refinery Richmend Refinery Richmend Refinery Richmend Refinery Richmend Refinery Richmend Refinery	Cracking (Rich)	FCC (Rich)	NGRU Other (FCC)		
1763882 12/14/2009 L.I 1842963 22/5/2010 L.I 1842963 22/5/2010 L.I 1842963 22/5/2010 N.I. 1810521 22/1/2010 N.I. 1810521 22/1/2010 N.I. 1934325 5/13/2010 N.I. 1957366 85/29/2010 N.I.	LI - Nen-Compliance Company Policy LI - Netice of Violation LI - Equipment Failure LI - Plant Run Out/Slow Down LI - Equipment/Unit Trip NLI - Business Internation NLI - Hearth & Food NLI - Non Compliance - Air NLI - Non Compliance	No Level Selected No Level Selected Level 1 Level 1 Level 1 Level 1 Level 1 Level 1 No Level Selected	Level 1 Level 1 Level 1 Level 1 Level 1 Level 5 Level 3 Level 1	During FCG start-up outside operators noticed a seal leak on P-123. Operators stopped the pump then White doing mounts in the FCC an Operator noticed a contractor sharpening a tool with a grindler caus Opacity meter failt? The laser sye was not point Loas of Signal from the FCC CEUS SQ2 Analyzer on Monday 12/14/09 1:00 PM. On Tuesday 12/15/09 The an The C-90 (fractionator) reflux control valve (SZFC105) was partially bypassed for maintenance, the u The C-90 (fractionator) reflux control valve (SZFC105) was partially bypassed for maintenance, the u The C-90 (fractionator) reflux control valve (SZFC105) was partially bypassed for maintenance, the u White switching pump TP-118A online for the spare pump run, the MCO suripper C-111 flow out was lost A BRAND EMPLOYEE CONSUMED SOME HOT SPICEYCHICKEN WINGS AND FRIES, FROM THE LUNCH The FCC got pretty close to exceeding the ESP parametric limits on secondary curron.	Richmond Refinery Richmend Refinery Richmend Refinery Richmend Refinery Richmond Refinery Richmond Refinery Richmond Refinery Richmend Refinery Richmend Refinery Richmend Refinery Richmend Refinery	Cracking (Rich)	FCC (Rich)	NGRU Other (FCC)		
1763882 12/14/2009 L.1 1842963 22/5/2010 L.1 1842963 22/5/2010 M.1 1802720 1/27/2010 M.1 1810521 21/2010 M.1 1934325 3/3/2010 M.1 1934326 5/29/2010 M.1 2040347 9/29/2010 M.1	LI - Nen-Compliance Company Policy LI - Notice of Violation LI - Equipment Failure LI - Plant Run Out/Slow Down LI - Equipment Unit Trip NLI - Business Interruption NLI - Health & Food NLI - Non Compliance - Air NLI - Non Compliance NLI - Non Compliance	No Level Selected No Level Selected Level 1 Level 1 Level 1 Level 1 Level 1 No Level Selected	Level 1 Level 1 Level 1 Level 1 Level 3 Level 3 Level 3 Level 1 Level 1 Level 1	During FCG start-up outside operators noticed a seal leak on P-123. Operators alopped the pump then White doing mounts in the FCC an Operator noticed a contractor sharpening a tool with a gdnder caus Opacity meter failure on FCC stack. 1) Why did the opacity meter fail? The laser eye was not point Losa of Signal from the FCC CEMS SO2 Analyzer on Monday 12/14/09 1:00 PM. On Tuesday 12/15/09 The an The C-90 (fractionator) reflex control valve (S2FC105) was partially bypassed for maintenance, the u The C-90 (fractionator) reflex control valve (S2FC105) was partially bypassed for maintenance, the u White switching pump TP-118A online for the sparse pump run, the MCO gripper C-111 flow out was lost A BRAND EMPLOYEE CONSULED SOME HOT SPICEYCHICKEN WHISS AND FRIES, FROM THE LUNCH The FCC got pretty close to exceeding the ESP parametric limits on secondary current. Contract employee did not sign in 16 FCC control house because they though they want told by a Chev FCC flare; Bief flare activity due to high flow from Alky relief drum V-734, Source being investiga	Richmand Refinery	Cracking (Rich)	FCC (Rich)	NGRU Other (FCC)		
1763882 12/14/2009 L.I 1842963 22/5/2010 L.I 1842963 22/5/2010 L.I 1842963 22/5/2010 N.I. 1810521 22/1/2010 N.I. 1810521 22/1/2010 N.I. 1934325 5/13/2010 N.I. 1957366 85/29/2010 N.I.	LI - Nen-Compliance Company Policy LI - Netice of Violation LI - Equipment Failure LI - Plant Run Out/Slow Down LI - Equipment/Unit Trip NLI - Business Internation NLI - Hearth & Food NLI - Non Compliance - Air NLI - Non Compliance	No Level Selected No Level Selected Level 1 Level 1 Level 1 Level 1 Level 1 No Level Selected No Level Solected	Level 1 Level 1 Level 1 Level 1 Level 5 Level 5 Level 5 Level 1	During FGC start-up outside operators noticed a seal leak on P-123. Operators alopped the pump then While doing munds in the FCC an Operator noticed a contractor sharpening a tool with a gindler caus Opacity meter failure on FCC stack. 1) Why did the opacity meter fail? The laser eye was not point loss of Signal from the FCC CEMS SO2 Analyzer on Monday 12/14/09 1:00 PM. On Turesday 12/15/09 The an The C-90 (fractionator) reflect control valve (S2FC105) was partially bypassed for maintenance, the unit of Symptomic Cemporary of the C-90 (fractionator) reflect control valve (S2FC105) was partially bypassed for maintenance, the unit of Symptomic Cemporary of the Ce	Richmond Refinery	Cracking (Rich)	FCC (Rich)	NGRU Other (FCC)		
1763882 12/14/2009 LJ 1842963 22/5/2010 LJ 1842963 22/5/2010 LJ 1842963 22/5/2010 NLJ 1840521 12/1/2010 NLJ 1810521 22/1/2010 NLJ 1954325 5/13/2010 NLJ 1954325 5/13/2010 NLJ 1957966 62/5/2010 NLJ 2040347 9/29/2010 NLJ 2041094 9/29/2010 LJ 1902545 44/17/2010 LJ 19015545 5/20/2010 LJ	LI- Nen-Complance Company Policy LI- Notice of Violation LI- Equipment Failure LI- Plant Run Out/Slow Down LI- Equipment/Unit Trip NLI- Business Internation NLI- Health & Food NLI- Non Compliance - Air NLI - Non Compliance NLI - Heart Compliance LI- FirefExplosion	No Level Selected No Level Selected Level 1 Level 1 Level 1 Level 1 Level 1 No Level Selected	Level 1 Level 1 Level 1 Level 1 Level 1 Level 3 Level 3 Level 1	During FGG start-up outside operators noticed a seal leak on P-123. Operators alopped the pump then White doing mounts in the FGC an Operator noticed a contractor sharponing a tool with a grinder caus Opacity meter failure on FGC stack. I) Why fild the opacity meter fail? The laser eye was not point Losa of Signal from the FGC CEMS SG2 Analyzer on Monday 12/14/09 1:00 PM. On Tuesday 12/15/09 The an The C-90 (fractionator) reflux control valve (S2FC105) was partially bypassed for maintenance, the u The C-90 (fractionator) reflux control valve (S2FC105) was partially bypassed for maintenance, the u White switching pump ITP-118A online for the spare pump run, the MCO sripper C-111 flow out was lost 1 A BRAND EMPLOYEE CONSULED SOME HOT SPICE/CHICKEM WHINSS AND FRIES, FROM THE LUNCH THE FGC got pretty close to exceeding the ESP parametric limits on secondary current. Contract employee 6td not sign in to FGC control house because they thought they were told by a Chev FGC flare; Brief flare activity due to high flow from Alty relief drum V-73, Source being investiga FGC flare; fire on piping at side of flare during flare operation. Flarnes were observed at vertical Alter placing the booster pump in service for E-171 (Gas Spliner Overhead Condenser) the gas Teedin Loss of scale on P-172A (FGC Frac SCG pump to JFT)	Richmond Refinery	Cracking (Rich)	FCC (Rich)	NGRU Other (FCC)		
1763882 12/14/2009 L.I 1842963 22/5/2010 L.I 1842963 22/5/2010 L.I 1842963 22/5/2010 N.I 1802720 1/27/2010 N.I 1810521 22/1/2010 N.I 1916525 5/13/2010 N.I 1916526 6/29/2010 N.I 2040347 9/29/2010 N.I 2041094 9/29/2010 L.I	LL- Nen-Compliance Company Policy L1- Nelice of Violation L1- Equipment Failure LL- Plant Run Out/Slow Down L1- Equipment/Unit Trip NL1- Business Internation NL1- Health & Food NL1- Hoelth & Food NL1- Non Compliance - Air NL1- Non Compliance NL1- Fire Explosion L1- Permt Exceedance L1- Plant Run Out/Slow Down L1- Safety Systems and Relief Devices	No Level Selected No Level Selected Level i No Level Selected No Level Selected No Level Selected No Level Selected Level i Level Level Selected Level Selected Level Selected Level I Level Level I Level Level I Level Level I Level	Level 1   Level 1   Level 1   Level 1   Level 1   Level 1   Level 3   Level 1   Level 2   Level 2   Level 2   Level 3   Level 3   Level 4   Level 5   Level 6   Level 7   Leve	During FCC start-up outside operators noticed a seal leak on P-123. Operators stopped the pump then White doing mounts in the FCC an Operator noticed a contractor sharpening a tool with a gender caus Opacity meter failure on FCC stack. 1) Why did the opacity meter failur than the FCC CEMS SO2 Analyzer on Monday 121/409 \$100 PM. On Tuesday 121/5/09 The an The C-90 (fractionator) reflex control valve (S2FC105) was partially bypassed for maintenance, the u The C-90 (fractionator) reflex control valve (S2FC105) was partially bypassed for maintenance, the u White switching pump TP-118A online for the sparse pump run, the MCO stripper C-111 flow out was lost A BRAND EMPLOYEE CONSUMED SOME HOT SPICEYCHICKEN WINGS AND FRIES, FROM THE LUNCH THE FCC got portly close to exceeding the ESP parametic limits on secondary curron.  Contract employee did not sign in to FCC control house because they thought they were told by a Chev FCC flare; Brief flare activity due to high flow from Alty relief drum V-734, Source being investiga FCC flare; for on piping at side of flare during flare operation. Planes were observed at vertical  Alter placing the booster pump in service for E-171 (Gas Splitter Overhead Condenser) the gas feecon  Loss of seal on P-172A (FCC Fine SIC Dump to JHT)  During certant of FCC unit after MADT SO, there was a flare event (Not recordable quantity or Conso	Richmend Refinery	Cracking (Rich)	FCC (Rich)	NGRU Other (FCC) SGRU SGRU SGRU		
1763882 12/14/2009 LI 1842851 22/5/2010 LI 1842953 22/5/2010 LI 1842953 22/5/2010 NLI 1810521 27/2010 NLI 1810521 27/2010 NLI 1810521 27/2010 NLI 1954155 5/13/2010 NLI 1957365 6/29/2010 NLI 2040347 9/29/2010 LI 2041994 9/29/2010 LI 1902545 4/17/2010 LI 1901565 5/20/2010 LI 1901565 5/20/2010 LI 1911565 5/20/2010 LI 1911565 5/20/2010 LI 1911565 5/20/2010 LI 191176551 1/17/2010 NLI	LI - Nen-Compliance Company Policy LI - Notice of Violation LI - Equipment Failure LI - Plant Run Out/Slow Down LI - Equipment/Unit Trip NLI - Business Interruption NLI - Health & Food NLI - Non Compliance - Air NLI - Non Compliance - Air LI - Non Compliance - Air LI - Firefixplosion LI - Permit Exceedance LI - Plant Run Out/Slow Down LI - Safety Systems and Relief Devices NLI - Safety Systems and Relief Devices NLI - Safety Systems and Relief Devices NLI - Safety Systems and Relief Devices	No Level Selected No Level Selected Level 1 Level 1 Level 1 Level 1 Level 1 Level 1 No Level Selected No Level Selected No Level Selected No Level Selected Level 1 Level 1 Level 1 Level 2 Level 1 Level 2 Level 1 Level 2 Level 2 Level 3 Level 4 Level 5 Level 6 Level 6 Level 6 Level 7 Level 8 Level 8 Level 8 Level 8 Level 8 Level 8 Level 9 Le	Level 1 Level 1 Level 1 Level 1 Level 5 Level 5 Level 1 Level 2 Level 2 Level 3 Level 3 Level 4 Level 4 Level 5 Level 5 Level 1 Level 1 Level 1 Level 1 Level 2 Level 1 Level 1 Level 2 Level 1	During FGC start-up outside operators noticed a seal leak on P-123. Operators alopped the pump then White olding munds in the FGC an Operator noticed a controller shappening a tool with a grinder caus Opacity meter failure on FCC stack. 1) Why did the opacity meter fail? The laser eye was not point load of signal from the FCC CEMS SO2 Analyzer on Monday 12/14/09 1:00 PM. On Tuesday 12/15/09 The an The C-90 (fractionator) reflick control valve (S2FC105) was partially bypassed for maintenance, the unit of the C-90 (fractionator) reflick control valve (S2FC105) was partially bypassed for maintenance, the unit of the C-90 (fractionator) reflick control valve (S2FC105) was partially bypassed for maintenance, the unit of the C-90 (fractionator) reflick control valve (S2FC105) was partially bypassed for maintenance, the unit of the C-90 (fractionator) reflick control valve (S2FC105) was partially bypassed for maintenance, the unit of the C-90 (fractionator) reflick control reflick control that the MCO gripper C-111 flow out was lost A BRAND EMPLOYEE CONSUMED SOME HOT SPIGEYCHICKEN WHOS AND FRIES, FROM THE LUNCH The FCC got pretty close to exceeding the ESP parametric limits on secondary current.  Contract employee did not sligh in to FCC control house because they thought they wore told by a Chev FCC flare; Brief flare activity due to high flow from Alky relief drum V-734, Source being investigation of the Control house in the C-130 (Sa Spiller Overhead Condense) the gas feecon Loss of seal on P-172A (FCC Finc S/C pump to JHT)  During metant of FCC unit after MART S/D, Users was a flare event (Not recordable quantity or Conse C-180 is a debtastager in the South GRU trust during normal operation miniors C-150 trame service).	Richmend Refinery	Cracking (Rich)	FCC (Rich)	NGRU Other (FCC) SGRU SGRU SGRU SGRU		
1763882 12/14/2009 LJ 1842963 22/5/2010 LJ 1842963 22/5/2010 LJ 1842963 22/5/2010 NLJ 1840521 12/1/2010 NLJ 1810521 22/1/2010 NLJ 1954325 5/13/2010 NLJ 1954325 5/13/2010 NLJ 2040347 9/29/2010 NLJ 2040347 9/29/2010 LJ 1902545 44/17/2010 LJ 1901565 5/2/20201 LJ 1911565 5/2/20201 LJ 1941766 5/3/1/2010 LJ 1739561 LJ 17729010 NLJ 17739661 NJ/7/2010 LJ	LI- Non-Complance Company Policy LI- Notice of Violation LI- Equipment Failure LI- Plant Run Out/Slow Down LI- Equipment Failure LI- Plant Run Out/Slow Down LI- Equipment Vali Trip NLI- Business Interaction NLI- Health & Food NLI- Non Compliance - Air NLI- Non Compliance - Air LI- Fire-Explosion LI- Permit Exceedance LI- Plant Run Out/Slow Down LI- Safety Systems and Railef Devices NLI- Safety Systems and Relief Devices LI- Safety Systems and Relief Devices LI- Safety Systems and Relief Devices	No Level Selected No Level Selected Level 1 Level 1 Level 1 Level 1 Level 1 Level 3 No Level Selected No Level Solected Level 1 Level 1 Level 1 Level 2 Level 1 Level 2 Level 2 Level 2 Level Selected Level 2 Level Selected	Level 1 Level 1 Level 1 Level 1 Level 5 Level 5 Level 1 Level 2 Level 3 Level 2 Level 3 Level 4 Level 5 Level 5 Level 5 Level 1 Level 5 Level 1 Level 7 Level 7 Level 8 Level 9 Level 9 Level 9 Level 1 Level 1 Level 1 Level 1	During FGC start-up outside operators noticed a seal leak on P-123. Operators alopped the pump then White doing mounts in the FGC an Operator noticed a contractor sharponing a tool with a grinder caus Opacity meter failure on FGC stack. I) Why did the opacity meter fail? The laser eye was not point (Losa of Signal from the FGC CEMS SG2 Analyzer on Monday 12/14/09 1:00 PM. On Tuesday 12/15/09 The an The C-90 (fractionator) reflux control valve (S2FC105) was partially bypassed for maintenance, the u The C-90 (fractionator) reflux control valve (S2FC105) was partially bypassed for maintenance, the u White switching pump IP-118A online for the spare pump run, the MCO stripper C-111 flow out was lost A BRAND EMP-OYEE CONSULED SOME HOT SPICE/CHACKEM WHOS SAMD FRIES, FROM THE LUNCH The FCC got pretty close to exceeding the ESP parametric limits on secondary current.  Contract employee did not sign in to FCC control house because they thought they were told by a Chey FCC flare; Berf flare activity due to high flow from Alty relief drum V-734, Source being investiga FCC flare; fire on piping at side of flare during flare operation. Flarnes were observed at vertical Alter placing the booster pump in service for F-171 (Gas Spiliner Overhead Condensor) the gas Lectin Loss of scale on P-1724 (FCC Fires SC goung to JHT)  During exetant of FCC unit after MART SO, there were a flare event (Not recordable quantity or Conse C-180 is a debutanizer in the South GRU that during normal operation milnors C-160 (stame service).	Richmond Refinery	Cracking (Rich)	FCC (Rich)	NGRU Other (FCC) SGRU SGRU SGRU SGRU SGRU		
1763882 12/14/2009 LI 1842963 22/5/2010 LI 1842963 22/5/2010 LI 1842963 22/5/2010 LI 1842963 22/5/2010 NLI 1810521 29/2/2010 NLI 1914325 5/13/2010 NLI 1957966 6/2/9/2010 NLI 2040347 9/2/9/2010 LI 2040347 9/2/9/2010 LI 1902545 4/17/2010 LI 1903545 4/17/2010 LI 1903545 5/12/2010 LI 1903545 5/17/2010 LI 1903545 6/17/2010 LI	LL- Nem-Compliance Company Policy LI- Notice of Violation LL- Equipment Failure LL- Plant Run Out/Slow Down LI- Equipment Unit Trip NLI- Business Internation NLI- Health & Food NLI- Hook & Food NLI- Hook Compliance - Air NLI- Non Compliance - Air LI- Fire Explosion LI- Plant Run Out/Slow Down LI- Plant Run Out/Slow Down LI- Safety Systems and Relief Devices NLI- Safety Systems and Relief Devices LI- Safety Systems and Relief Devices	No Level Selected No Level Selected Level 1 No Level Selected No Level Selected No Level Selected No Level Selected Level 1 Level 1 Level 1 Level 2 Level 1 Level 2 Level 2 Level 2 Level 1 Level 1 Level 2 Level 1 Level 1 Level 1 Level 1 Level 1 Level 2 Level 1	Level 1 Level 1 Level 1 Level 1 Level 1 Level 1 Level 3 Level 1 Level 2 Level 1	During FCC start-up outside operators noticed a seal leak on P-123. Operators stopped the pump then White doing mounts in the FCC an Operator noticed a contractor sharpening a tool with a gender caus Opacity meter failure on FCC stark. I) Why did the opacity meter failure has the was not point to say of the property of the page of the property. The laser eye was not point to say of the C-90 (fractionator) reflex control valve (S2FC105) was partially bypassed for maintenance, the unit of C-90 (fractionator) reflex control valve (S2FC105) was partially bypassed for maintenance, the unit of C-90 (fractionator) reflex control valve (S2FC105) was partially bypassed for maintenance, the unit of C-90 (fractionator) reflex control valve (S2FC105) was partially bypassed for maintenance, the unit of C-90 (fractionator) reflex control valve (S2FC105) was partially bypassed for maintenance, the unit of C-90 (fractionator) reflex control valve (S2FC105) was partially bypassed for maintenance, the unit of C-90 (fractionator) reflex to the C-90 (fractionator) reflex to the unit of C-90 (fractionator) reflex to the C-90 (fract	Richmend Refinery	Cracking (Rich)	CC (Rich) FCC (Rich)	NGRU Other (FCC) SGRU SGRU SGRU SGRU SGRU		
1763882 121/4/2009 LJ 1842163 225/2010 LJ 1842263 225/2010 LJ 1802720 1/27/2010 NLI 1810521 221/2010 NLI 1910521 221/2010 NLI 1934325 5/13/2010 NLI 1957966 625/2010 NLI 2040347 3/29/2010 LJ 1907545 4/17/2010 LJ 1907545 3/20/2010 LJ 1907545 1/2010 LJ 1910556 1/20/2010 LJ 1041766 55/1/2010 LJ 1749961 1/17/2010 LJ 1749961 1/17/2010 LJ 1749961 1/17/2010 LJ 1749961 1/17/2010 NLI 2010562 62/2/2010 LJ 1915531 528/2/2010 LJ 1915531 528/2/2010 LJ 1915531 528/2/2010 LJ	LI- Nen-Compliance Company Policy LI- Notice of Violation LI- Equipment Failure LI- Plant Run Out/Stow Down LI- Equipment Valid Trip NLI - Business Interruption NLI - Hearth & Food NLI - Non Compliance - Air NLI - Non Compliance - Air LI - Non Compliance - Air LI - Fire/Explosion LI - Permit Exceedance LI - Plant Run Out/Stow Down LI - Safety Systems and Relief Devices	No Level Selected No Level Selected Level 1 Level 1 Level 1 Level 1 Level 1 Level 1 No Level Selected Level 1	Level 1 Level 1 Level 1 Level 1 Level 5 Level 5 Level 5 Level 1 Level 2 Level 2 Level 1 Level 2 Level 1 Level 1 Level 3 Level 2 Level 1 Level 1 Level 3 Level 1 Level	During FCG start-up ortiside operators noticed a seal leak on P-123. Operators alopped the pump then White doing munds in the FCC an Operator noticed a contractor sharpening a tool with a gdnder caus Opacity meter failure on FCC stack. 1) Why did the opacity meter fail? The laser eye was not point loss of Signal from the FCC CEMS SO2 Analyzer on Monday 12/14/09 1:00 PM. On Tuesday 12/15/09 The an The C-90 (fractionator) reflex control valve (S2FC105) was partially bypassed for maintenance, the u The C-90 (fractionator) reflex control valve (S2FC105) was partially bypassed for maintenance, the u White writching pump IP-1184 entine for the sparse pump run, the MCO gripper C-111 flow out was lost A BRAND EMPLOYEE CONSUMED SOME HOT SPICE/CHRICKEN WHOS S AND FRIES, FROM THE LUNCH The FCC got pretty close to exceeding the ESP parametric limits on secondary current.  Contract employee did cet sign in the FCC control house because they thought they were told by a Chev FCC flare; fire on piping at side of flore during flare operation. Flames were observed at vertical Alter placing the booster pump in service in the 1411 (Gas Spiriter Overhead Condense) the gas feedin Loss of sail on P-172A (FCC Fine SiC pump to JHT)  During creater of FCC unit after MADT SO), there were a flare event (Not recordable quantity or Consec C-180 is a debutantier in the South GRU that during normal operation miniors C-160 (same service).  Flaring event at V-731 A and V-732A when C-180 Debutantier was being put in service.	Richmond Refinery	Cracking (Rich)	FCC (Rich)	NGRU Other (FCC) SGRU SGRU SGRU SGRU SGRU		
1763882 12/14/2009 LJ 1842853 22/5/2010 LJ 1842953 22/5/2010 LJ 1802720 14/27/2010 NLJ 1810521 27/2010 NLJ 1934122 57/2010 NLJ 1954122 57/2010 NLJ 1954122 57/2010 NLJ 1954123 57/20210 NLJ 2040347 3/20/2010 LJ 2040347 3/20/2010 LJ 1902545 44/7/2010 LJ 1902545 5/20/2010 LJ 1901565 5/20/2010 LJ 19141765 5/20/2010 LJ 1941765 5/20/2010 LJ 1941765 5/20/2010 LJ 1951565 3/20/2010 LJ 1951584 1/20/2010 NLJ 2010565 8/20/2010 LJ 1951345 9/4/2000 NLJ 2029587 9/6/2010 LJ	LI- Non-Complance Company Policy LI- Notice of Violation LI- Equipment Failure LI- Plant Run Out/Slow Down LI- Equipment Failure LI- Plant Run Out/Slow Down LI- Equipment/Unit Trip NLI - Business Interruption NLI - Hon Compliance - Air NLI - Non Compliance - Air NLI - Non Compliance - Air LI - Fire-Explosion LI - Permit Exceedance LI - Plant Run Out/Slow Down LI - Safety Systems and Relief Devices NLI - Safety Systems and Relief Devices LI - Safety Systems and Relief Devices	No Level Selected No Level Selected Level 1 No Level Selected No Level Solected No Level Solected No Level Solected No Level Selected No Level Selected No Level Selected No Level Selected Level 1 Level 1 Level 1 Level 2 Level 1 Level 2 Level 1 Level 3 Lovel 5 Level 1 Level 1 Level 1 Level 1 Level 1 Level 2 Level 1 Level 3 Level 5 Level 1 Level 1 Level 5 Level 1 Level 2 Level 1 Level 1 Level 2 Level 1 Level 3 Level 3 Level 3 Level 4 Level 4 Level 4 Level 5 Level 5 Level 5 Level 5 Level 5 Level 5 Level 6 Level 1 Level 6 Level 6 Level 7 Level 7 Level 8 Level 8 Level 9 Le	Level 1 Level 1 Level 1 Level 1 Level 5 Level 5 Level 1 Level 2 Level 1 Level 2 Level 2 Level 2 Level 2 Level 3 Level 4 Level 4 Level	During FGG start-up outside operators noticed a seal leak on P-123. Operators alopped the pump then White doing mounts in the FGC an Operator noticed a contractor sharponing a tool with a grinder caus (Opacity meter failure on FGC stack. 1) Why fild the opacity meter fail? The laser eye was not point (Losa of Signal from the FGC CEMS SO2 Analyzer on Monday 12/14/09 1:00 PM. On Tuesday 12/15/09 The an The C-90 (fractionator) reflux control valve (S2FC105) was partially bypassed for maintenance, the u The C-90 (fractionator) reflux control valve (S2FC105) was partially bypassed for maintenance, the u White switching pump ITP-118A online for the spare pump run, the MCO sripper C-111 flow out was lost 1 A BRAND EMPLOYEE CONSULED SOME MOT SPICE/CHICKEM WHINSS AND FRIES, FROM THE LUNCH THE FGC got pretty close to exceeding the ESP parametric limits on secondary current.  Contract employee did not sign in to FGC control house because they thought they were told by a Chev FGC flare; Brief flare activity due to high flow from Alty relief drum V-734, Source being investiga FGC flare; fire on piping at side of flere during flare operation. Flarnes were observed at vertical Alter placing the booster pump in service for E-171 (Gas Spiliner Overhead Condense) the gas Lectin Loss of scale on P-172A (FGC Fire SGC pump to JHT)  During retart of FGC unit after MABT SO, there was a flare event flost recordable quantity of Conse C-180 is a debutanizer in the South GRU Inst during normal operation milinors C-180 (spassine to tankage pump) so in the FGC a TR-2 was dumping and charging V-252 Propane treater. White duming ing to the holding verse.	Richmend Refinery	Cracking (Rich)	CC (Rich) FCC (Rich)	NGRU Other (FCC) O		
1763882 12/14/2009 LI 184285 22/5/2010 LI 184295 22/5/2010 LI 184295 22/5/2010 LI 1802720 1/27/2010 NLI 1810521 21/2010 NLI 1810521 21/2010 NLI 1954325 5/13/2010 NLI 1954365 5/23/2010 NLI 2040347 32/9/2010 LI 1902545 4/77/2010 LI 1932545 4/77/2010 LI 1931545 5/12/2010 LI 1734961 1/77/2010 NLI 1001552 8/29/2010 LI 1801552 8/29/2010 LI 1801545 9/14/2009 NLI 1950145 9/14/2009 NLI 1950145 9/14/2009 NLI 1950145 9/14/2009 LI 19502570 II	LI- Nen-Compliance Company Policy LI- Notice of Violation LI- Equipment Failure LI- Plant Run Out/Stow Down LI- Equipment Valid Trip NLI - Business Interruption NLI - Hearth & Food NLI - Non Compliance - Air NLI - Non Compliance - Air LI - Non Compliance - Air LI - Fire/Explosion LI - Permit Exceedance LI - Plant Run Out/Stow Down LI - Safety Systems and Relief Devices	No Level Selected No Level Selected Level 1 Level 1 Level 1 Level 1 Level 1 Level 1 No Level Selected Level 1	Level 1 Level 1 Level 1 Level 1 Level 5 Level 5 Level 5 Level 1 Level 2 Level 2 Level 1 Level 2 Level 1 Level 1 Level 3 Level 2 Level 1 Level 1 Level 3 Level 1 Level	During FCG start-up ortiside operators noticed a seal leak on P-123. Operators alopped the pump then White doing munds in the FCC an Operator noticed a contractor sharpening a tool with a gdnder caus Opacity meter failure on FCC stack. 1) Why did the opacity meter fail? The laser eye was not point loss of Signal from the FCC CEMS SO2 Analyzer on Monday 12/14/09 1:00 PM. On Tuesday 12/15/09 The an The C-90 (fractionator) reflex control valve (S2FC105) was partially bypassed for maintenance, the u The C-90 (fractionator) reflex control valve (S2FC105) was partially bypassed for maintenance, the u White writching pump IP-1184 entine for the sparse pump run, the MCO gripper C-111 flow out was lost A BRAND EMPLOYEE CONSUMED SOME HOT SPICE/CHRICKEN WHOS S AND FRIES, FROM THE LUNCH The FCC got pretty close to exceeding the ESP parametric limits on secondary current.  Contract employee did cet sign in the FCC control house because they thought they were told by a Chev FCC flare; fire on piping at side of flore during flare operation. Flames were observed at vertical Alter placing the booster pump in service in the 1411 (Gas Spiriter Overhead Condense) the gas feedin Loss of sail on P-172A (FCC Fine SiC pump to JHT)  During creater of FCC unit after MADT SO), there were a flare event (Not recordable quantity or Consec C-180 is a debutantier in the South GRU that during normal operation miniors C-160 (same service).  Flaring event at V-731 A and V-732A when C-180 Debutantier was being put in service.	Richmend Refinery	Cracking (Rich)	FCC (Rich)	NGRU Other (FCC) SGRU SGRU SGRU SGRU SGRU SGRU SGRU SGRU		
1753882 12/14/2009 LI 1842853 22/5/2010 LI 1842853 22/5/2010 LI 1842953 22/5/2010 LI 1842953 22/5/2010 NLI 18105212 12/1/2010 NLI 1810521 22/1/2010 NLI 19517965 62/2/2010 NLI 19517965 62/2/2010 NLI 20403479 32/5/2010 LI 1902545 47/7/2010 LI 1903565 5/20/2010 LI 1903565 5/20/2010 LI 1903565 1/20/2010 LI 17799561 LI 17799561 LI 17799561 LI 1765628 82/202010 LI 1650145 82/8/2010 LI 1770403 12/23/2009 LI	LI- Nem-Compliance Company Policy LI- Nelice of Violation LI- Equipment Failure LI- Plant Run Out/Slow Down LI- Equipment Haiture LI- Plant Run Out/Slow Down LI- Equipment/Unit Trip NII- Business Internation NII- Health & Food NII- Hon Compliance - Air NII- Non Compliance - Air LI- Fire Texplosion LI- Plant Run Out/Slow Down LI- Plant Run Out/Slow Down LI- Safety Systems and Relief Devices NII- Safety Systems and Relief Devices LI- Equipment Failure NII- Non Compliance LI- Safety Systems and Relief Devices LI- First Aid	No Level Selected No Level Selected Level 1 No Level Selected No Level Selected No Level Selected No Level Selected Level 1 Level 2 Level 1 Level 2 Level 1 Level 3 Level 5 Level 1	Level 1 Level 1 Level 1 Level 1 Level 1 Level 5 Level 1 Level 3	During FGC start-up outside operators noticed a seal leak on P-123. Operators slopped the pump then White doing mounts in the FCC an Operator noticed a contractor sharpening a tool with a grinder caus Opacity meter failure on FCC stark. I) Why did the opacity meter fail? The laser eye was not point loss of Signal from the FCC CEMS SO2 Analyzer on Monday 121/4/09 1:00 PM. On Tuesday 121/5/09 The an The C-90 (fractionator) reflux control valve (S2FC105) was partially bypassed for maintenance, the u The C-90 (fractionator) reflux control valve (S2FC105) was partially bypassed for maintenance, the u White switching pump IP-118A online for the spane pump run, the MCO stripper C-111 flow out was lost A BRAND EMP, OYEE CONSUMED SOME HOT SPICEYCHICKEN WINGS AND FRIES, FROM THE LUNCH THE FCC got pretty close to exceeding the E3P parametric limits on secondary current. Contract employee did not sign in to FCC control house because they thought they were told by a Chev FCC flare: Brief flare advirty due to high flow from Alky relief drum V734, Source being investiga FCC flare: Brief flare advirty due to high flow from Alky relief drum V734, Source being investiga FCC flare: fro en piping at side of flare during flare operation. Plarnes were observed at vertical Alter placing the booster pump is service to FA77 (Gas Spitter Overhead Condense) the gas feedin Loss of rasin en P-1724, ffCC Frac SCC pump to JHT)  During restart of FCC unit after MABT S/D, there was a flare event (Not recordable quarriéty or Consa C-180 is a debutantizer in the South GRU that during normal operation miniors C-160 stame service). Flaring event at V-7314 and V-732A when C-180 Debutantizer was being put in service.  TOP INVESTIGATION—P-257A SEAL FAILURE—On June 28, 2010, P-257A (FCC gasoline to tankage pump) se in the FCC a TR-2 was dumping and charging V-252 Propane treater. White durping to the holding vesse Three safety, PSV FC-185, Islanded of a thole beltom of C-180 Debutantizer was being but in service to a high what on the surres.  White wo	Richmend Refinery	Cracking (Rich)	CCC (Rich) FCC (Rich)	NGRU Other (FCC) SGRU SGRU SGRU SGRU SGRU SGRU SGRU SGRU		
1753882 12/14/2009 LJ 184283 22/5/2010 LJ 184293 22/5/2010 LJ 1802720 12/7/2010 NLI 1951521 29/7/2010 NLI 1951523 5/13/2010 NLI 1951523 5/13/2010 NLI 1951524 79/7/2010 NLI 1951525 5/13/2010 NLI 2040347 3/29/2010 NLI 2040347 3/29/2010 LJ 1902555 4/17/2010 LJ 1902555 4/17/2010 LJ 1931565 3/20/2010 LJ 1941766 5/3 1/2010 LJ 1739561 1/17/2010 NLI 2010562 8/29/2010 LJ 195154 8/28/2010 LJ 1751650 B/28/2010 LJ 1751650 B/28/2010 LJ 1751650 B/28/2010 LJ	LI- Nem-Compliance Company Policy LI- Nelice of Violation LI- Equipment Failure LI- Plant Run Out/Slow Down LI- Equipment Haiture LI- Plant Run Out/Slow Down LI- Equipment/Unit Trip NLI- Business Internation NLI- Health & Food NLI- Non Compliance - Air NLI- Non Compliance - Air LI- Fire Texplosion LI- Plant Run Out/Slow Down LI- Plant Run Out/Slow Down LI- Safety Systems and Relief Devices NLI- Safety Systems and Relief Devices LI- First Aid LI- Operational Leak LI- Equipment/Unit Trip LI- First Explosion	No Level Selected No Level Selected Level 1 No Level Selected No Level Selected No Level Selected No Level Selected Level 1 Level 2 Level 1 Level 3 Level 3 Level 3 Level 3	Level 1 Level 1 Level 1 Level 1 Level 5 Level 5 Level 1 Level 2 Level 2 Level 3 Level 1 Level 3	During FGC start-up outside operators noticed a seal leak on P-123. Operators alopped the pump then White olding muncls in the FGC an Operator noticed a controller shappening a tool with a glindler caus Opacity meter failure on FCC stack. 1) Why did the opacity meter fail? The laser eye was not point load of signal from the FCC CEMS SO2 Analyzer on Monday 12/14/09 1:00 PM. On Tuesday 12/15/09 The an The C-90 (fractionator) reflict control valve (S2FC105) was partially bypassed for maintenance, the unit of Cempler of the Cempl	Richmend Refinery	Cracking (Rich)	FCC (Rich)	NGRU Other (FCC) SGRU SGRU SGRU SGRU SGRU SGRU SGRU SGRU		
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1763882 1271472009 LJ 1842953 22572010 LJ 1842753 22572010 LJ 1842753 22572010 LJ 1842753 22572010 NLI 1810521 22772010 NLI 1934325 571372010 NLI 1934325 571372010 NLI 1937966 62572010 NLI 2041947 32572010 LJ 194194 32572010 LJ 1932565 37272010 LJ 1932565 37272010 LJ 1931565 37272010 LJ 1941766 55172010 LJ 1779960 17772010 LJ 1010562 62372010 LJ 1010562 62372010 LJ 105062 62372010 LJ 105063 107172010 LJ 1044661 107172010 LJ 10812086 107172010 LJ	LI- Non-Complance Company Policy LI- Notice of Violation LI- Equipment Failure LI- Plant Run Out/Slow Down LI- Equipment Failure LI- Plant Run Out/Slow Down LI- Equipment Unit Trip NLI - Business Internation NLI - Health & Food NLI - Hon Compliance - Air NLI - Hon Compliance - Air LI- Fire/Explosion LI- Permit Exceedance LI- Plant Run Out/Slow Down LI- Safety Systems and Relief Devices NLI - Safety Systems and Relief Devices LI- Equipment Failure NLI - Safety Systems and Relief Devices LI- Equipment/NLI Trip LI- First Aid LI- Equipment/NLI Trip LI- Fire/Explosion LI- Less of Certainment (LOC) Tier 1 NLI - Iscamed Product LI- Day Away From Work Case	No Level Selected No Level Selected Level 1 No Level Selected No Level Selected No Level Selected No Level Selected Level 1 Level 1 Level 1 Level 1 Level 2 Level 1 Level 1 Level 1 Level 1 Level 3 Level 5 Level 3 Level 5 Level 5 Level 3 Level 5 Level 6 Level 6 Level 6 Level 6 Level 6 Level 7 Level 6 Level 7 Le	Level 1 Level 1 Level 1 Level 1 Level 5 Level 5 Level 1 Level 2 Level 1 Level 3 Level 3a Level 1 Level 3a	During FCG start-up ortiside operators noticed a seal leak on P-123. Operators alopped the pump then White doing munds in the FCC an Operator noticed a contractor sharpening a tool with a glinder caus Opacity meter failure on FCC stack. 1) Why did the opacity meter fail? The laser eye was not point to a stignal from the FCC CEMS SO2 Analyzer on Monday 12/14/09 1:00 PM. On Tuesday 12/15/09 The an The C-90 (fractionator) reflex control valve (SEFC105) was partially bypassed for maintenance, the unit of C-90 (fractionator) reflex control valve (SEFC105) was partially bypassed for maintenance, the unit of C-90 (fractionator) reflex control valve (SEFC105) was partially bypassed for maintenance, the unit of C-90 (fractionator) reflex control valve (SEFC105) was partially bypassed for maintenance, the unit of C-90 (fractionator) reflex control valve (SEFC105) was partially bypassed for maintenance, the unit of C-90 (fractionator) reflex control reflex of the C-90 (fractionator) reflex control valve (SEFC105) was partially bypassed for maintenance, the unit of C-90 (fractionator) reflex control reflex cont	Richmand Refinery	Cracking (Rich)	FCC (Rich)	NGRU Other (FCC) SGRU SGRU SGRU SGRU SGRU SGRU SGRU SGRU		
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1763882   1274/2009   L	LI- Nem-Complance Company Policy LI- Notice of Violation LI- Equipment Failure LI- Plant Run Out/Slow Down LI- Equipment Failure LI- Plant Run Out/Slow Down LI- Equipment Lint Trip NLI - Business Internation NLI - Health & Food NLI - Non Compliance - Air NLI - Non Compliance - Air LI- Fire Explosion LI- Pelmit Exceedance LI- Plant Run Out/Slow Down LI- Safety Systems and Relief Devices LI- First Aid LI- Operational Leak LI- Equipment Leak LI- Equipment Leak LI- Equipment Closs LI- First Aid NLI - Equipment Damage NLI - Safety Systems and Relief Devices LI- First Aid NLI - Equipment Damage NLI - Safety Systems and Relief Devices LI- Equipment Damage NLI - Safety Systems and Relief Devices LI- Safety Systems and Relief Devices LI- Safety Systems and Relief Devices LI - Safety Systems and Relief Devices LI - Safety Systems and Relief Devices	No Level Selected No Level Selected Level 1 No Level Selected No Level Selected No Level Selected No Level Selected Level 1 Level 1 Level 2 Level 1 No Level Selected Level 1 Level 3 Level 1 Level 3 Level 3 Level 3 Level 3 Level 3 Level 1 Level 3 Level 1 Level 3 Level 3 Level 3 Level 1 Level 3 Level 3 Level 3 Level 1 Level 3 Level 3 Level 3 Level 3 Level 3 Level 1 Level 5 Level 3 Level 5 Level 6 Level 6 Level 7 Level 7 Level 7 Level 7 Level 7 Level 8 Level 9	Level 1 Level 1 Level 1 Level 1 Level 1 Level 5 Level 5 Level 1 Level 2 Level 1 Level 2 Level 1 Level 1 Level 1 Level 2 Level 1 Level 3 Level 1 Level 3 Level 1 Level 3 Level 3 Level 3 Level 3 Level 1 Level 3 Level 1 Level 3	During FGC start-up outside operators noticed a seal leak on P-123. Operators alopped the pump then White olding munds in the FGC an Operator noticed a contractor sharpening a tool with a glinder caus Opacity meter failure on FCC stack. 1) Why did the opacity meter fail? The laser eye was not point to a stignal from the FCC CEMS SO2 Analyzer on Monday 12/14/09 1:00 PM. On Tuesday 12/15/09 The an The C-90 (fractionator) reflict control valve (CSFC105) was partially bypassed for maintenance, the unit of CSPC105 in the MCO gripper C-111 flow out was lost the CSP0 (fractionator) reflict control valve (CSFC105) was partially bypassed for maintenance, the unit of CSPC105 in the MCO gripper C-111 flow out was lost the BRAND EMPLOYEE CONSUMED SOME HOT SPICEYCHICKEN WHISE SAMD FRIES. FROM THE LUNCH The FCC got pretty close to exceeding the ESP parametric limits on secondary current.  Contract employee did not sligh in to FCC control house because they thought they wore told by a Chev FCC flare; Brief flare activity due to high flow from Alty relief drum V-734, Source being investiga. FCC flare: fire on piping at side of flare during flare operation. Flares were observed at vertical. Alter placing the booster pump in service in the F171 (GSS Spliter Overhead Condense) the gas feedin Loss of seal on P-172A (FCC Frac SiC pump to JHT)  During netter of FCC unit after MABT S/D, there was a flare event (Not recordable quantity or Consa C-180 is a debutantizer in the South GRU that during normal operation miniors C-160 same service). Flating event at V-734 and V-732A when C-180 Debutanizer was being put in service.  FIGH INVESTIGATION—P-275A SEAL FAULINE—On Junce 28, 2010, P-5274 (FCC gasoline to tankage pump) so in the FCC a TR-2 was dumping and charging V-252 Propane treater. While dumping to the holding vesse The safety, PSV FC-163, located off of the bettem of C-180 Debutanizer operacd. This immediate unreas While working on V-60 the Journeyman Mech sent Traine to refleve tools from the work fluck below.  On rightshift Men	Richmend Refinery	Cracking (Rich)	CC (Rich)   FCC	NGRU Other (FCC) SGRU SGRU SGRU SGRU SGRU SGRU SGRU SGRU		
1763882   1214/2009   L	LI- Non-Complance Company Policy LI- Notice of Violation LI- Equipment Failure LI- Plant Run Out/Slow Down LI- Equipment Failure LI- Plant Run Out/Slow Down LI- Equipment In Trip NLI- Business Interruction NLI- Health & Food NLI- Non Compliance - Air NLI - Non Compliance - Air LI- Fire-Explosion LI- Permit Exceedance LI- Plant Run Out/Slow Down LI- Safety Systems and Relief Devices NLI- Safety Systems and Relief Devices LI- First Aid LI- Pirst Aid LI- Pirst Aid LI- Devices LI- First Aid LI- Loss of Centainment (LOC) Yer 1 NLI- Non Compliance LI- Safety Systems and Relief Devices LI- First Aid LI- Lies Devices LI- First Aid LI- Lies Devices LI- First Aid LI- Lies Devices LI- Safety Systems and Relief Devices LI- Equipment Damage NLI- Aid Compliance - Air LI- Lies Devices LI- Equipment Damage NLI- Safety Systems and Relief Devices LI- Equipment/Lind Trip	No Level Selected No Level Selected Level 1 No Level Selected No Level Selected No Level Selected No Level Selected Level 1 Level 1 Level 2 Level 1 Level 2 Level 1 Level 2 Level 2 Level 2 Level 3 Level 3 Level 3 Level 3 Level 4 Level 1 Level 3 Level 4 Level 4 Level 5 Level 5 Level 5 Level 5 Level 1 Level 1 Level 1 Level 1 Level 3 Level 3 Level 3 Level 3 Level 3 Level 3 Level 1 Level 3 Level 3 Level 3 Level 3 Level 1 Level 3 Level 1 Level 3 Level 3 Level 3 Level 3 Level 3 Level 1 Level 3 Level 4 Level 4 Level 5 Level 5 Level 5 Level 5 Level 5 Level 5 Level 1 Level 4 Level 5 Level 6 Level 6 Level 6 Level 6 Level 7 Level 7 Level 7 Level 7 Level 8 Level 9 Le	Level 1 Level 1 Level 1 Level 1 Level 1 Level 5 Level 5 Level 5 Level 1 Level 2 Level 1 Level 2 Level 1 Level 2 Level 1 Level 3 Level 1 Level 3 Level 3 Level 1 Level 3 Level 3 Level 1 Level 2 Level 3 Level	During FGG start-up ortiside operators noticed a scall leak on P-123. Operators alopped the pump then White doing munds in the FGC an Operator noticed a contractor sharpening a tool with a glinder caus Opacity meter failure on FCC stack. 1) Why did the opacity meter fail? The laser eye was not point to a strong the failure on FCC stack. 1) Why did the opacity meter fail? The laser eye was not point to C-90 (fractionator) reflux control valve (SZFC105) was partially bypassed for maintenance, the unit of C-90 (fractionator) reflux control valve (SZFC105) was partially bypassed for maintenance, the unit of C-90 (fractionator) reflux control valve (SZFC105) was partially bypassed for maintenance, the unit of C-90 (fractionator) reflux control valve (SZFC105) was partially bypassed for maintenance, the unit of C-90 (fractionator) reflux control valve (SZFC105) was partially bypassed for maintenance, the unit of C-90 (fractionator) reflux control valve (SZFC105) was partially bypassed for maintenance, the unit of C-90 (fractionator) reflux control valve (SZFC105) was partially bypassed for maintenance, the unit of C-90 (fractionator) reflux control valve (SZFC105) was partially bypassed for maintenance, the unit of C-90 (fractionator) reflux control valve (SZFC105) was partially bypassed for maintenance, the unit of C-90 (fractionator) reflux control valve (SZFC105) was partially bypassed for maintenance, the unit of C-90 (fractionator) was partially bypassed for maintenance, the unit of C-90 (fractionator) was partially bypassed for maintenance, the unit of C-90 (fractionator) was partially bypassed for maintenance, the unit of C-90 (fractionator) was partially bypassed for maintenance, the unit of C-90 (fractionator) was partially bypassed for maintenance, the unit of C-90 (fractionator) was partially bypassed for maintenance, the unit of C-90 (fractionator) was partially bypassed for maintenance, the unit of C-90 (fractionator) was partially bypassed for maintenance, the unit of C-90 (fractionator) was partially p	Richmand Refinery	Cracking (Rich)	CC (Rich)   FCC	NGRU Other (FCC) SGRU SGRU SGRU SGRU SGRU SGRU SGRU SGRU		
1763882 12/14/2009 LJ 1842963 22/5/2010 NLJ 1810521 27/2010 NLJ 1810521 27/2010 NLJ 1957966 62/9/2010 NLJ 2040347 9/29/2010 LJ 2040347 9/29/2010 LJ 1905245 447/7/2010 LJ 1905245 447/7/2010 LJ 1905245 47/7/2010 LJ 1905245 47/7/2010 LJ 1911565 5/2/20201 LJ 1914766 5/3/20201 LJ 1914766 5/3/20201 LJ 17739561 LJ 1772000 NLJ 1770403 12/20201 LJ 1770403 12/20200 LJ 1770403 12/20200 LJ 1770403 12/20200 LJ 1770403 12/20200 LJ 1905747 47/5/2010 LJ 1852965 10/217/2010 LJ 18529766 22/2/2010 LJ 18529766 10/17/2010 LJ 18529761 10/17/2010 LJ	LI- Nem-Complance Company Policy LI- Notice of Violation LI- Equipment Failure LI- Plant Run Out/Slow Down LI- Equipment Failure LI- Plant Run Out/Slow Down LI- Equipment Lint Trip NLI - Business Internation NLI - Health & Food NLI - Non Compliance - Air NLI - Non Compliance - Air LI- Fire Explosion LI- Pelmit Exceedance LI- Plant Run Out/Slow Down LI- Safety Systems and Relief Devices LI- First Aid LI- Operational Leak LI- Equipment Leak LI- Equipment Leak LI- Equipment Closs LI- First Aid NLI - Equipment Damage NLI - Safety Systems and Relief Devices LI- First Aid NLI - Equipment Damage NLI - Safety Systems and Relief Devices LI- Equipment Damage NLI - Safety Systems and Relief Devices LI- Safety Systems and Relief Devices LI- Safety Systems and Relief Devices LI - Safety Systems and Relief Devices LI - Safety Systems and Relief Devices	No Level Selected No Level Selected Level 1 No Level Selected No Level Selected No Level Selected No Level Selected Level 1 Level 1 Level 2 Level 1 No Level Selected Level 1 Level 3 Level 1 Level 3 Level 3 Level 3 Level 3 Level 3 Level 1 Level 3 Level 1 Level 3 Level 3 Level 3 Level 1 Level 3 Level 3 Level 3 Level 1 Level 3 Level 3 Level 3 Level 3 Level 3 Level 1 Level 5 Level 3 Level 5 Level 6 Level 6 Level 7 Level 7 Level 7 Level 7 Level 7 Level 8 Level 9	Level 1 Level 1 Level 1 Level 1 Level 1 Level 5 Level 5 Level 1 Level 2 Level 1 Level 2 Level 1 Level 1 Level 1 Level 2 Level 1 Level 3 Level 1 Level 3 Level 1 Level 3 Level 3 Level 3 Level 3 Level 1 Level 3 Level 1 Level 3	During FGC start-up outside operators noticed a seal leak on P-123. Operators alopped the pump then White olding munds in the FGC an Operator noticed a contractor sharpening a tool with a glinder caus Opacity meter failure on FCC stack. 1) Why did the opacity meter fail? The laser eye was not point to a stignal from the FCC CEMS SO2 Analyzer on Monday 12/14/09 1:00 PM. On Tuesday 12/15/09 The an The C-90 (fractionator) reflict control valve (CSFC105) was partially bypassed for maintenance, the unit of CSPC105 in the MCO gripper C-111 flow out was lost the CSP0 (fractionator) reflict control valve (CSFC105) was partially bypassed for maintenance, the unit of CSPC105 in the MCO gripper C-111 flow out was lost the BRAND EMPLOYEE CONSUMED SOME HOT SPICEYCHICKEN WHISE SAMD FRIES. FROM THE LUNCH The FCC got pretty close to exceeding the ESP parametric limits on secondary current.  Contract employee did not sligh in to FCC control house because they thought they wore told by a Chev FCC flare; Brief flare activity due to high flow from Alty relief drum V-734, Source being investiga. FCC flare: fire on piping at side of flare during flare operation. Flares were observed at vertical. Alter placing the booster pump in service in the F171 (GSS Spliter Overhead Condense) the gas feedin Loss of seal on P-172A (FCC Frac SiC pump to JHT)  During netter of FCC unit after MABT S/D, there was a flare event (Not recordable quantity or Consa C-180 is a debutantizer in the South GRU that during normal operation miniors C-160 same service). Flating event at V-734 and V-732A when C-180 Debutanizer was being put in service.  FIGH INVESTIGATION—P-275A SEAL FAULINE—On Junce 28, 2010, P-5274 (FCC gasoline to tankage pump) so in the FCC a TR-2 was dumping and charging V-252 Propane treater. While dumping to the holding vesse The safety, PSV FC-163, located off of the bettem of C-180 Debutanizer operacd. This immediate unreas While working on V-60 the Journeyman Mech sent Traine to refleve tools from the work fluck below.  On rightshift Men	Richmend Refinery	Cracking (Rich)	CC (Rich)   FCC	NGRU Other (FCC) SGRU SGRU SGRU SGRU SGRU SGRU SGRU SGRU		

The content of the						THE CONTRACT OF THE PARTY OF TH		LEVEL1 ( )	LEVEL2	LEVEL3	LEVEL4	LEVELS LEVELS
Company						Constitute avise	READ SE WAS WORKING IN THE FOCURITY CREW FINISHED LOADING THE FLATBED TRUCK WITH NINE		The state of the s			
Column		37 (2323-1-7					4 the start of nightshift 11/leb/2019 at about 17:10 the CBO noticed that F-300 FCC stack CEMS was	Richmond Refinery				
Column	1893412 4	4/8/2010										
Column			1			Level 1	IX-303, FCC yard air compressor, tripped off line on 8/7/10 at 00:15. X-2600 (Hydro) was immediate!					
The color of the								Richmond Refinery				
The content of the			LI			Level 1	Re-routing C-1320 bottoms from C-400 to C-1020 as per the seldom used Butamer Plant shutdown procedu					
The content of the	2014122											
Column   C												
Column						Level 2	P-1481 developed a leak that spilt acid into it's containment basin. The containment basin is a term	Richmond Refinery				
Company   Comp						Level 1						
Column   C												
Column												
Column								Richmond Refinery	Cracking (Rich)	LPG/Alky (Rich)	Alky Unit	
Column   C							three morning the plants are proceedings and appearance of the plants and the plants are proceedings are procedings are proceedings are procedings a					
The content of the												
The color of the												
Column   C				LI - Plant Run Out/Slow Down	No Level Selected							
The content of the	1565573					Level 1	At 08:43 on 7/27/2009, Butamer Plant Butane Charge Pump P-1300A Shut Down, causing plant upset and t					
The color												
The Control												
The color					·	Level 1	On 3/25/10, a full milear (UTLX 95/204) carrying C4 olefins was mistakenly sent out of the refinery		Cracking (Rich)	LPG/Alky (Rich)		
The color	1962343											
The color of the												
Column   C						-					LPG Ralicar Racks	
1.						Level 1						
The color of the	1962343											
Company   Comp												
Company   Comp				The state of the s			C4 Olefin(13212) madvertently routed to Blend T-3071 which called for C5 Olefin(T-3211), P-772 (Ole	Richmond Refinery	Cracking (Rich)	LPG/Alky (Rich)	LPG Spheres & Truck racks	
Proceedings	1669101	10/11/2009										
Section   Column		***************************************										
1985   1						Level 1	T-3208 Sales propane sphere off-test for IC4 content. Sales propane IC4 content should be less than					
Column   C	171222						While loading a LPG Truck, some LPG was sent to the relief system via a blowdown valve. The flow ra					
Proc.   Company   Compan												
1987   1												
Column   C									Cracking (Rich)			
1975    1975    1												
1995   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996   1996												
The colors   Color			u									
Part				Repartable					0 11 22 1)	1 00111 10111	0145011100	
	1733108	11/17/2009	l l		Lovel 1	Level 1	On or about the meming of Nov 17th, area operators on the LPG area noticed a light eletin odor in a	Kichmond Kelinery	Cimetang (Rich)	LPG/Alky (Rich)	Connect (CIPCALIAT)	
Triple   100000000000000000000000000000000000	1733108	11/17/2009	-lu -l	· · · · · · · · · · · · · · · · · · ·	Level 1	Level 1	On or about the morning of Nov 17th, area operators on the LPG area noticed a light clefin odor in a					
1995   10   10   10   10   10   10   10   1	1778403											
Company   Comp												
Triangle			NLI	NLI - Equipment Damage					Cracking (Rich)			
1.   1.   1.   1.   1.   1.   1.   1.												
Section   Process   Section   Process   Section   Sect												
Triggress   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000   1972,000			NU		No Level Selected	Level 1	Operators shutdown Poly Reactor V-620 B loop when P-621B experienced a seal failure. The seal had be					
Page-1886   Control												
1995   1   1   1   1   1   1   1   1   1	1756575	12/12/2009	la l		Level 3a	Level 3a		School of the second se	Cracking (rots)	D-G-AKY (Aidi)	Posy Flam (D-GOADKI)	<u> </u>
Trigonome   Trig	1756575	12/12/2009	LI		Level 3a	Level 3a						
1779-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770-77   1770												
1995   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997			14	D - Edelpitant i andie								
1951-06   197-2076   10   10   10   10   10   10   10   1						Level 1						
1			NLI	NLI - Spil					Cracking (Rich)			
1781966   27/2010   U.   1.   Equipment Date	1756374	12/12/2009										
1997/27   1992/2006   N.J.   N.J.   Experiment Law   N.J.   Experiment Law   N.J.   Experiment College   Law   1   Outro growth of the pay South experts responded to 16   Richmont Referency   Coasting (Rich)   LPA/NY (Rich)   Pop Plant (LPA/LAY)							White performing the Cuick Test procedure (POLKO4J) on F-651 In the Poly Plant, the fuel has choose					
1977-237   727/2510   N.J.   N.J.   PL-Fighteent Cannage   No. Lever Street Col.   PL-Fill (Placebore constance) (Place) but when shared in a constant Find is generated in reported to fill (Placebore Col.   Placebore Col.   P			NU	NLI - Operational Leak			Ouring normal operation The poly plant operator noticed a leak coming from B loop sample draw line o	Richmond Refinery	Cracking (Rich)	LPG/Alky (Rich)	Poly Plant (LPG/ALKY)	
2372010   U   U   Equipment Fallow   Level   Level   Pop Pant Reed was putted and plant   placed on closeding (Rind)   EGALAY (Rico)   Pop Pant (EPADALY)	1990732	7/27/2010	NLI	NLI - Equipment Damage	No Level Salected	Level 1	P-621B (Reactor emulsion pump) low level seel all alarm activated. Field operator responded to fill					
17512400   175720700   1			NLI									
100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014   100-1014			H .									-
109:1919   505/2010   Nul   Nul   Five-Epiposian   No Level Selected   Level   After welding the sleave on P-2110 The Fire wetch as lapted to mostery (b) 20 min. steer for Not Note   All 100 Files at SRU			- Li				Contract EE after draw filing on a flange, stopped to wise some sweat from his forehead. He wiped hi	Richmond Refinery	Cracking (Rich)	SRU (Rich)	2100 Plant #1 SRU	
Part	2021919	9/5/2010		NLI - Fire/Explosion	No Level Selected	Level t	After welding the sleeve on P-2110 The Fire watch asigned to monitor job 30 min, after Hot Work has		Cracking (Rich)			
1920/24   1987/97   1   1   1   1   1   1   1   1   1												
1552001   1027/2009   U U - Equipment Failure   Level 1   Level 1   SRU 2200 plant tripped of file when the main reaction furnace received a low level indication (FSC   Richmond Referency   Cracking (Rich)   SRU (Rich)   200 Plant #2 SRU   1   Equipment Failure   Level 1   Level 1   SRU 2200 plant tripped of the when the main reaction furnace received a low level indication (FSC   Richmond Referency   Cracking (Rich)   SRU (Rich)   200 Plant #2 SRU   1   Equipment Failure   Level 1   Level 1   New valves were received a low level indication (FSC   Richmond Referency   Cracking (Rich)   SRU (Rich)   200 Plant #2 SRU   1   Equipment Failure   Level 1   Level 1   New valves were received a low level indication (FSC   Richmond Referency   Cracking (Rich)   SRU (Rich)   200 Plant #2 SRU   1   Equipment Failure   Level 1   Level 1   Received for the main reaction furnace received a low level indication (FSC   Richmond Referency   Cracking (Rich)   SRU (Rich)   200 Plant #2 SRU   1   Equipment Failure   Level 3   Equipment Failure   Level 3   Equipment Failure   Level 4   Equipment Failure   Level 5   Equipment Failure   Level 5   Equipment Failure   Level 5   Equipment Failure   Level 5   Equipment Failure   Level 6   Equipment Failure   Level 6   Equipment Failure   Level 7   Equipment Failure   Level 8   Equipment Failure   Level 8   Equipment Failure   Level 1   Equipment Failure   Level 1   Equipment Failure   Level 1   Eq			lu lu									
1593107   159212009   U   U   Explainer Failure   Level 1   Level 1   SEN 2200 plant tripped off line when the main reaction tumace received a low level indication (FSC   Riching (Rich)   2200 Plant #R SPU   1200 Plant #R SPU   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   1912009   191200			-lü				SRU 2200 plant tripped off line when the main readfor furnace recieved a low level indication (FSC	Richmond Refinery	Cracking (Rich)	SRU (Rich)	2200 Plant #2 SRU	
1918/868   4713/2010   Nil   Nil   Captador   Captador   Captador   Richmond Refinery   Cap	1683001	10/21/2009	ш	LI - Equipment Failure	Level 1	Level 1	SRU 2200 plant tripped off line when the main reaction furnace received a low level indication (FSC					
1918568   A13/2010   NLI   NLI - Operational Laak   No Level Selected   Level 1   EE was working on the ADA in SRU when he roticed a strong PI2S addr which caused his personal monitor   Richmord Refinery   Cracking (Rich)   SRU (Rich)   2200 Plant RZ SRU			u									
1560725   1523/2009   N.L.   N.L.   Business Process   No. Level Selected   Level 1   During 2 train sturrup at the SRU, 22T1101 (main reseten furnece temp- an infrared temperature in   Richmord Refinery   Cracking (Rich)   SRU (Rich)   2200 Plant R2 SRU												
1561753   77207000   NLI   NLI - Operational Leak   No Level Selected   Level 1   Condensate line demo job. Contract EE cut Into a 3/4" inch line. While making a cut at txi tape   Richmord Refinery   Cracking (Rich)   SRU (Rich)   2200 Plant #Z SRU     1579028   B1152709   NLI   NLI - Contractor Injury   No Level Selected   Level 1   Two Contract EE; were working on the reacter several maintains breakfast full ties set mannway. The charge (Rich)   SRU (Rich)   SRU (Rich)   2200 Plant #Z SRU     159204   B1152700   NLI   NLI - Contractor Injury   No Level Selected   Level 1   NoN Work RELATED Contract EE; were working on the reacter several maintains breakfast full ties set mannway. The mannway   Richmord Refinery   Cracking (Rich)   SRU (Rich)   2200 Plant #Z SRU     1597177   List of the contractor   NLI   Salety Systems and Relief Devices   No Level Selected   Level 2   E-2240 code repairs required a hydrostatic test of 1,5 trees MAWP. Contract company was provided de   Richmord Refinery   Cracking (Rich)   SRU (Rich)   2200 Plant #Z SRU     1593176   B772009   NLI   NLI - Employea higher   No Level Selected   Level 1   While taping up the hose for the vacuum gizzaler, Contractor EE(Rodwood)was should be a recommendated on point for last was a size of the vacuum gizzaler, Contractor EE(Rodwood)was should be a recommendated on point for last was a size of the vacuum gizzaler, Contractor EE(Rodwood)was should be a recommendated on point for last was a size of the vacuum gizzaler, Contractor EE(Rodwood)was should be a recommendated on point for last was a size of the vacuum gizzaler, Contractor   Richmord Refinery   Cracking (Rich)   SRU (Rich)   2300 Plant #Z SRU								Richmond Refinery			2200 Plant #2 SRU	
1576028   1712009   NLI   NLI - Contractor Injury   No Level Selected   Level 1   Two Contract EEs were working on the reactor R-2201cutting off a mannay. Richmond Refinery   Cracking (Rich)   SRU (Rich)   1200 Plant R2 SRU	1561753	7/23/2003	NU	NU - Operational Leak	No Level Selected	Level 1	condensate line demo job. Contract EE cut Into a 3/4" Inch line. While making a cut at cut tape I	Richmond Refinery	Cracking (Rich)	SRU (Rich)		
1597379   1597209   Nil   NL   Safety Systems and Relief Devices   No Level Selected   Level 2   E-2240 code repairs required a hydrostratic test of 1,5 times MAWP. Confract company was provided do   Richmond Refinery   Cracking (Rich)   SRU (Rich)   2200 Plant #2 SRU	1576028		NLI	NLI - Contractor Injury								
1553227   15772009   NLI   NLI - Employes Injury   No Level Selected   Level 1   While taping up the hose for the vacuums gazzier, Contractor EE(Redwood)was struck by a canwas toel   Richmond Refinery   Cracking (Rich)   SSU (Rich)   2200 Plant #35 SRU     157574   1572009   LI   LI - Equipment Pailure   Level 3a   A potential for leat was discovered on top of \$75 per 1710/05, SRU #37 Train Main Reaction Furnace at 1710/05, SRU #37 Train Main Reaction Furn												
1937/148 5/26/2010 LI LI - Equipment Failure Level 3a Level 3a A potential for leak was discovered on top of #3 Train Main Reaction Furnace at SRU. It is an old th Richmond Refinery Cracking (Rich) SRU (Rich) 2300 Plant #3 SRU  1875675 7/31/2009 LI LI - Equipment/Unit Trip Level 1 Level 1 At @ 22/45 hvs Friday 7/31/05, SRU #3 Tripped First cod indication showed low differential pressure Richmond Refinery Cracking (Rich) SRU (Rich) 2300 Plant #3 SRU  1875675 7/31/2009 LI LI - Equipment/Unit Trip Level 1 Level 1 White attempting on a 400 plant condensate drum (V-2501), operator was using Richmond Refinery Cracking (Rich) SRU (Rich) 2500 Plant #1 SRU  1881159 4/7/2010 LI LI - Business Process Level 1 Level 1 Routine maintenance work process experienced a business informultion as a result of unplanted revork Richmond Refinery Cracking (Rich) SRU (Rich) Other (SRU)  1539732 7/6/2009 NILI NLI-NAVC-Contractor No Level Salested Level 2 CCE vohicle—van #4/11—was backing out of a parking spet at SRU North Lot. A Fluor employee was w Richmond Refinery Cracking (Rich) SRU (Rich) Other (SRU)							While taping up the hose for the vacuums guzzler, Contractor EE(Redwood)was struck by a canvas tool	Richmond Refinery	Cracking (Rich)	SRU (Rich)	2200 Plant #2 SRU	
165400 7/10/2009 LJ U-FIST AIS Level 1 Level 1 While attempting to open the drain valve on 2600 plant condensate dram (V-2601), operator was using Richmond Relinery Cracking (Rich) SRU (Rich) 2600 Plant / SO2  1891159 41/2010 LI LI-Business Process Level 1 Level 1 Routine maintenance work process experienced a business information as a result of unplanned remork Relinery Cracking (Rich) SRU (Rich) Other (SRU)  1539732 7/6/2009 NIL NLL-NAVC-Contractor No Level Selected Level 2 CCE vohicle—van #4/11—was backing out of a parking spot at SRU North Lot. A Fluor employee was w Richmond Refinery Cracking (Rich) SRU (Rich) Other (SRU)		5/26/2010	Li	LI - Equipment Failure	Level 3a	Level 3a	A potential for leak was discovered on top of #3 Train Main Reaction Furnace at SRU. It is an old th		Cracking (Rich)	SRU (Rich)		
1891159 4/1/2010 Lt Lt- Business Process Lavel 1 Level 1 Routine maintenance work process experienced a business information as a result of unplanned remork Richment Refinery Cracking (Rich) SRU (Rich) Other (SRU) 1539732 7/6/2009 NILI NILI-NAYC - Contractor No Level Selected Level 2 CCE vohicle - van #4/11 - was backing out of a parking spct at SRU North Lot. A Fluor employee was w Richment Refinery Cracking (Rich) SRU (Rich) Other (SRU)			Ц									
155732 766/2009 NIL NLI-NVC - Contractor No Level Selected Level 2 CCE volvide - van #471 - was backing out of a parking epct at SRU North Lot. A Fluor employee was w Richmond Refinery Cracking (Rich) SRU (Rich) Other (SRU)			LI									
			NLI				CCE vohicle van #471 was backing out of a parking spct at SRU North Lot. A Fluor employee was w	Richmond Refinery				
	1539722	7/6/2009	u	LI - Equipment Damage	Level 1	Level 2	Crew were building and as they were setting a strong back into place to hang a log, one of the crew	Richmond Refinery	Cracking (Rich)	SRU (Rich)	Other (SRU)	
1595488 E18/2009 LI LI-General Liability Level 1 Level 1 Mobile trailer deconstruction personnel placed a sowage tank, that contained some waste, learning on Richmond Refinery Cracking (Rich) SRU (Rich) Other (SRU)	1595468	8/18/2009		LI - General Liability	Level 1							
1774063 127972009 NLI INU - NVC - Contractor No Level Selected Level 1 The sulfur loading rack is used to lead sulfur tracks with motion sulfur for transport. Normally a Richmend Refinery Cracking (Rich) SNU (Rich) Sulfur Tank & Loading Racks	[177408]	12/29/2009	ואנו	FULL - MARY - COURLEGUEL	THO CEAS! PESCUED	Ireser :	Line pours renewal service races to seek present traces with messent entrol for neutronic securiosis in	G-winners Ingestiga	lana and traces	1 hours	The state of the s	

CONTROL	DATE OF	ecieva e ti	OSS TYPE	ACTUALLEVEL	POTENTIAL LEVEL	ICIDENT DESCRIPTION	LEVELT )	LEVEL2	LEVEL3	LEVEL4	LEVELS	LEVEL6
		NU I				OP INVESTIGATION-S2 SPILL-A contract truck driver was performing a routine 52 loading @ the S2 Truc	Richmond Refinery	Cracking (Rich)	SRU (Rìch)	Sulfur Tank & Loading Racks		
	4/28/2010	U L	- Product Quality (int)		Level 3n 7	his investigation covers both reasons for off-test jet product: the leaking exchanger, E-1107, at t	Richmond Refinery			#4 Crude Unit		
	2/3/2010					t 1500 hours 4 Feb 2010 a contractor reported to the D&R East Head Operator that on 3 Feb 2010 while	Richmend Refinery Richmend Refinery			#4 Crude Unit #4 Crude Unit		
	7/24/2009 B/4/2009					nlended to purchase new re-designed channels for the E-1103 an E-1104 heat exchangers in #4CU, but buring start up of 4 crude a flange on the atmospheric short loop developed a flange leak. The vapor	Richmond Refinery			#4 Crude Unit		
	4/7/2010					White performing a special procedure to take the overflesh system out of service in 4 Crude Unit, a	Richmend Refinery			\$4 Crude Unit		
	1/19/2010	LI L	- Equipment Failure	Level 1	Level 1	-1 165A had a soal leak on 01/19/2010 night shift after ops. Intempted to put into service.	Richmond Railnery			#4 Crude Unit		
	7/26/2009			Level 2		NITIAL, REPORT—At approx 4am K-1171A appears to have been severely hit with figuid causing the dist	Richmond Refinery			#4 Crude Unit		
	4/22/2010					rew was conducting x-ray on a 8" line coming out of F-1160, all shots completed without incident V/ ruring the 4 Crude Unit shuddown C-1160 over head system exceeded 450 degree limit.	Richment Refinery	Distriction & Reforming (Rich)		84 Crude Unit		
	7/26/2009 5/29/2010					OP INVESTIGATION-DAR K1003 COMPRESSOR TRIP	Richmond Refinery			#4 Crude Unit		
	10/14/2009					Operator was de-LOTO ing P-1601 for warm up. In the process of turning one valve, the operators ling	Richmond Refinery			#4 Crude Unit		
		u 1				ther the 4 Crude start up the operations tried to energize the desorter grids , they were high in a	Richmond Refinery			#4 Crude Unit		
1619775						OP INVESTIGATION-NH3 EXPOSURE AT V-1169B-V-1159B, Off-Gas Compressor Knockout Drum for the	Richmend Refinery			#4 Crude Unit		
						TOP INVESTIGATION—Two electricisms were doing routine unline motor tests of checking amps and volt	Richment Refinery Richment Refinery			#4 Crude Unit #4 Crude Unit		
				No Level Selected No Level Selected		S/C availability to HNC decreased from 23 MBPD to 19 MBPD over a few hours. This was caused by the well-by come found themselves in the middle of X-ray barrie.	Richmond Refinery			#4 Crude Unit		
	3/15/2010			No Level Selected		h EE was working Inside an Analyzer shelter when he open the door to leave the shelter he found him	Richmond Refinery			#4 Crude Unit		
	8/9/2009		t.1 - Agency Warning - Air	No Level Selected	Love! 1	typess left open on E-1107 when removing shutdown isolation LOTO resulting in loss of preheat in oru	Richmond Refinery			#4 Crude Unit		
	B/9/Z009		ILI - Operational Leak	No Level Salected		typess left open on E-1107 when removing shuldown isolation LOTO resulting in loss of prohest in cru	Richmond Refinery			#4 Crude Unit		
	8/9/2009		ill - Reienso	No Level Selected		typess ian open on 6-1107 when removing shutdown Isolation LOTO resulting in loss of preheat in cru	Richmond Refinery Richmond Refinery			#4 Crude Unit #4 Crude Unit		
	9/23/2009 10/21/2009		ILI - Equipment Damago ILI - Equipment Damago	No Level Selected No Level Selected		Joon returning from being repeited, P-1149 was turned ever to Ops from Maint, Ops was preparing to OP INVESTIGATION-P-1165A APS VALVE	Richmond Refinery			#4 Crude Unit		
	12/24/2009		ILI - General Liability	No Level Solected		ther testing alarms K-1100 B shutdown when the shutdown bypass switch was returned to the run posit	Richmond Refinery	Distillation & Reforming (Rich)	D&R East (Rich)	\$4 Crude Unit		
1591327	10/27/2009		LL - Plant Run Out/Slow Down	No Level Selected		Yarming up P-1159 for hot alignment (6 s/c product) caused a loss of suction pressure to P-1168 (VTC	Richmond Refinery	Distillation & Reforming (Rich)	D&R East (Rich)	#4 Crude Unit		
1651318	9/26/2009		(U - Equipment Damage	No Level Selected		on 9/26/2009, at 0431, P-1165 tripped off fine due to low lube oil pressure. At that point operatio	Richmond Refinery			#4 Coude Unit		
1577823	0/29/2009		1 - First Aid	Level 1		mptoyee left discomfort in eye, Reported to circle to flush eye, No material was found in eye,	Richmend Refinery Richmend Refinery			#4 Crude Unit #5 H2S		
1540055	7/5/2009		I - Sale Operating Limit (SOL) Exceeded  I - First Aid	Level 2		OP INVESTIGATION—C-810 FOAMING: 20 PLANT SHUTDOWN INCREASED FLOW OF SOUR GAS TO \$H2S lockpit the HO called saying an operator was requesting for someone to lock at her knee which was he	Richmond Refinery			#5 HZS		
	8/15/2009 7/20/2009			Level 1		In Menday july 20th around 4 pm during last round employee was out in the CHT. He got something in	Richmond Refinery			#5 H2S		
	11/29/2009			No Level Selected		figh LPG make in the D&R complex exceeded the hydrolic capacity of C-860 this raises C-860 pressure	Richmond Refinery	Distillation & Reforming (Rich)	D&R East (Rich)	#5 H2S		
1549141	7/14/2009	NLI	ILI - Product Quality [Inf)	No Level Selected	Level 1	artier today, we reduced the C-450 draw rate to the Penhex. At the same time, we were supposed to	Richmond Refinery			#5 H2S .		
	9/14/2009			No Level Selected		the DHT had a compressor failure and the DHT operators had to perform an emergency shutdown of the D	Richmond Refinery Richmond Refinery			#5 H2S #5 H2S		
1828225	7/14/2010			No Level Selected Level 1	Level 1	oving installation of VOC legs on the new VBTO analyzer buildings the technician felt heat on his hin preparation to put C-1600 Recycle Gas (H2S absorber in service the residual level of non DEA an	Richmons Refinery		D&R East (Rich)	Diesel Hydro Treater		
1979951	9/15/2009		I - Equipment/Unit Trip	Level 1	Level 1	ti – 21:00 the DHT recycle compressor speed controller (Trisen) started acting eratically even thoug	Richment Refinery	Distillation & Reforming (Rich)	D&R East (Rich)	Diesel Hydro Treater		
1981669	7/10/2010			Level 1	Level 1	Employee experienced an allergic reaction to septood that was being cooked in control house.	Richmond Refinery	Distillation & Reforming (Rich)	D&R East (Rich)	Diesel Hydro Treater		
	7/0/2010	u	3 - Operational Leak	Level 3a	Loyel 3a	on July 9, 2010 at 8:35 p.m. the feed pump to the Richmond Diesel Hydrolyeater (DHT), P-1601, shull d	Alchmond Relinery			Dieset Hydro Treater		
1976552	7/9/2010			Level 3a		On July 9, 2010 at 8:35 p.m. the feed pump to the Richmond Dieset Hydrotreater (DHT), P-1501, shut d	Richmond Refinery Richmond Refinery	Distillation & Reforming (Rich) Distillation & Reforming (Rich)	D&R East (Rich) D&R East (Rich)	Diesel Hydro Treater Diesel Hydro Treater		
1976552	7/9/2010 9/15/2009			Level 3a No Level Selected	Level 3a (	On July 9, 2010 at 8:35 p.m. the feed pump to the Richmond Diesel Hydrotreater (DHT), P-1601, shut d The DHT was operating in a steady state condition when K-1600 recycle compressor and surge valve 16	Richmond Refinery		D&R East (Rich)	Diesel Hydro Treater		
	3/28/2010		LI - Product Contamination (Int)	No Level Selected		TOP INVESTIGATION-DHT HIGH SULFUR-Diesel Tail Line Product was high in Sulfur coment on 3/28/10.	Richmond Refinery		D&R East (Rich)	Diesel Hydro Treater		
1770377	12/23/2009		ILI - Business Interruption	No Level Selected		On Monday the electricians were sent out to MP-1601 in OHT to attach a kep top computer to download	Richmons Refinery	Distillation & Reforming (Rich)	D&R East (Rich)	Diesel Hydro Treater		
1564577	7/26/2009	NLI	ILI - Contractor Injury	No Level Selected		mplayee was assisting Times in hang a coma long inside reactor R-1610 as employee looked up some de	Richmond Refinery	Distillation & Reforming (Rich)	DSR East (Rich)	Diesel Hydre Treater		
1583904	8/3/2009			No Level Selected		n the process of displacing sour DEA from C-1600 to the relief drum a small flow of H2 was released	Richmond Refinery Richmond Refinery		D&R East (Rich)	Dieset Hydro Treater Dieset Hydro Treater		
1639589	9/17/2009 7/14/2010			No Level Selected No Level Selected		f-1610 in the DHT was out of the MOx polygon for a 24 hour period following the compressor trip an S During his round the operator in the DHT noticed insulation smalldering on the outlet cold feed valv	Richmond Referery		D&R East (Rich) D&R East (Rich)	Diesel Hydro Treater		
1931363	2/1/2010			Level 1		Aproximately 0830 a large flow of gas from V-3211 Into flare gas recovery compressor K-3950 caused t	Richmond Refinery		D&R East (Rich)	LSFO Flare	1	
1546372	EV11/2009			No Level Selected		26R was trying to purge the condensed light ends out of the out of service 166L (D&R H2 Export Unw	Richmond Refinery	Distillation & Referming (Rich)	D&R East (Rich)	LSFO Flans		
	8/6/2009			Level 1		Aproximately 10;15 A.M. K-3950 shut down due to a high liquid level in the first stage knock out. 39	Richmens Ratinery		D&R East (Rich)	LSFO Flare		
1576520	8/3/2009			Level 1		(-3950 tripped due to low suction pressure as it was being unloaded , V-1190 off-gas flow rate had t	Richmond Refinery		D&R East (Rich)	LSFO Flare		
1675802	7/11/2010			Level 1 No Level Selected		TOP INVESTIGATION-LEVEL CONTROLLER ISSUES AT K-3950 CAUSES FLARING On the previous shift hydrocarbon was introduced into the DEA system while placing contector in serv	Richmond Refinery Richmond Refinery			LSFO Flare	***************************************	
1976387	7/10/2010		VIJ - Lessons Learned	No Level Selected	Level 1	While depressuring E-1665 to relief with Nitrogen we experienced break through and tripped the total	Richmond Refinery			LSFO Flare		
1725261	11/11/2009		NU - Lessons Leamed	No Level Selected	Level 1	Hear Loss - Potential exposure to H2S and liquid hydrocarbon release.	Richmend Refriery			LSFO Flare		
17252G1	11/11/2009	NLI		No Level Selected	Level 1	Near Loss - Potential exposure to H2S and liquid hydrocarbon release.	Richmend Refinery	Distillation & Reforming (Rich)	D&R East (Rich)	LSFO FIRM		
1725261	11/11/2009			No Level Selected		Near Loss - Patential exposure to H2S and liquid hydrecarbon release.	Richmond Refinery	Oistillation & Reforming (Rich)	D&R East (Rich)	LSFO Flare		
1731718	11/24/2009			No Level Selected No Level Selected	Level 1	Unknown release to fare causing high liquid level in fare gas recovery compressor knockout pot (V During the clean up and depressurigation of the DHT the flow to refer exceeded the capacity of the	Richmond Refinery Richmond Refinery	Distillation & Reforming (Rich) Distillation & Reforming (Rich)	O&R East (Rich)  D&R East (Rich)	USFO Flare		
1561049	7/24/2009 8/25/2009			No Level Selected		At approximately 2100 hours #4H2S experienced an upset. To avoid lifting a safety in V-475 the Isoma	Richmens Refinery	Distillation & Reforming (Rich)		LSFO Flare		
1580728	8/5/2009	NLI		No Level Selected		Approximately 1300 ff1 Power plant blew down a vessel to DER relief system at a high rate. The console	Richmond Refinery	Distillation & Referming (Rich)		LSFO Flare		
1583589	7/25/2009	NU	NLI - General Liebliity	No Level Selected		During the clean up and depressurization of 4CAT the flow to relief exceeded the capacity of the flo	Richmond Refinery			LSFO Flare		
1586972	B/11/2009	NLI		No Level Selected		D&R was trying to purge the condensed light ends out of the out of service 1961. (D&R H2 Export Line	Richmond Refinery	Distillation & Reforming (Rich)		LSFO Flere		
1552085	7/23/2009	<u>u</u>		Level 1		During cleanup of the DHT plant, H2 used for the holdripping phase of tyrie cleanup was being switch TOP REVESTIGATION-LOSS OF GHT FEED PUMP-On June 29, 2010 at approximately 4:20pm D&R (Distillation	Richmend Refinery Richmend Refinery	Ostiliation & Referming (Rich)  Ostiliation & Referming (Rich)	D&R East (Rich) D&R East (Rich)	LSFO Flant Other (D&R East)		
1958938	6/29/2010	11		Level 1	Level 1	TOP INVESTIGATION-LOSS OF GHT FEED PUMP-On June 29, 2010 at approximately 4:20pm D&R (Distillation	Richmond Refinery	Distillation & Reforming (Rich)	DAR East (Rich)	Other (D&R East)		
1751079	12/8/2009	u	Li - Spill	Level 1		Contaminated Spent Carbon spiž during transfer operations due to equipment fature, a broken alumin	Richmond Refinery	Distillation & Referming (Rich)	DER East (Rich)	Other (D&R East)		
1930287	5/19/2010	NLI	NU - Permit Exceedance	No Level Selected	Level 1	On 19/may/2010 at 12:27 Hrs, Outside Operator was checking suction pressure on K-3950 when suction p	Richmond Ralinery	Distillation & Reforming (Rich)		Other (D&R East)		
2010887	8/23/2010	NLI	NLI - Plant Run Out/Slow Down	No Level Selected	Leval 1	TOP INVESTIGATION-LOSS OF GHT FEED PUMP-On August 23, 2010 at approximately 20:30 hours, the Gasol	Richmond Rafinery	Distillation & Referring (Rich)	D&R East (Rich)	Other (DER East)		
	B/27/2009	NLI	NLI - Non-Complence Company Policy NLI - Product Unavailable	No Level Selected No Level Selected		a lote box was left on a piece of equipment skitce 2007  Air Products notified INPACT group that they would be unable to provide a PCS Unit (NZ) for the GHT	Richmond Refinery Richmond Refinery	Distillation & Reforming (Rich) Distillation & Reforming (Rich)		Other (D&R East) Other (D&R East)		
1552926 1706430	7/21/2009	NL)	NLI - Product Onaviatable LI - Product Quality (Int)	Level 1	Level 1	AIT PRODUCTS ROUTING INPACT group that they would be unable to provide a PCS that (NZ) for the GPT I TOP SINESTIGATION-GHT Product Off Text-Gasoline hydrotreator product was routed off text. The lev	Richmond Refinery	Distillation & Reforming (Rich)	D&R East (Rich)	Other (D&R East)		
1641362	8/5/2009	Li		Level 1		While becking up a company truck the rear bumper hit the rear tailight on the Nalco car.	Richmend Refinery	Distillation & Reforming (Rich)	D&R General (Rich)	D&R Admin Office Building #3		
1855393	3/4/2010	u	LI - First Aid	Level 1	Level 1	Upon returning to his truck after bottle delivery to O&R, employee noticed bleeding on his left thurn	Richmond Refinery	Distillation & Reforming (Rich)		D&R Central House		
2000269	8/9/2010	LI	LI - MVC - Company	Lovel 1	Level 1	Employee was driving north on Petrolite St. and making a right onto Rerun St. to enter the D&R Contr	Richmond Refinery	Distillation & Reforming (Rich)		D&R Control House		
1539741	7/5/2009			No Level Selected No Level Sciented	Lavel 1	Worker was walking on a 12' beam without being lied off with Hamess Lanyard. (10 feet above ground TOP INVESTIGATION-PIPE FELL FROM PIPERACK AT SH25	Richmond Refinery Richmond Refinery	Distillation & Reforming (Rich) Distillation & Reforming (Rich)	D&R General (Rich) D&R General (Rich)	Other (D&R) Other (D&R)		
1721250	11/16/2009	NLI		No Level Selected	Lavel 2	TOP INVESTIGATION-PIPE FELL FROM PIPERACK AT SHZS	Richmend Refinery	Distillation & Referming (Rich)	DER General (Rich)	Other (D&R)		
1536568	7/2/2009			Level 1	Level 2	Worker was walking down the V-line and fell something in his felt eye.	Richmond Refinery	Distillation & Reforming (Rich)	DJR General (Rich)	Other (D&R)		
1953286	7/19/2010		Lí - Release	Lovel 1	Level 1	This loss investigation is for Penhax reactor excursion and flare totalizer trip that was a conseque	Richmond Refinery	Distillation & Reforming (Rich)	D&R General (Rich)	Other (D&R)		
1775341	12/30/2009	ĻI		Level 1	Level 1	The operator was using an extended reach forkall equipped with a hook attachment secured to the for	Richmond Refinery	Distiliation & Reforming (Rich)	D&R General (Rich)	Other (D&R)		
1976462	7/9/2010	LI .		Level 1	Level 1	Employee was noting a bits to the control from and left a sting or title on the neck. Employee immed	Richmond Refinery Richmond Refinery	Distillation & Reforming (Rich) Distillation & Reforming (Rich)	D&R General (Rich) D&R General (Rich)	Other (D&R) Other (D&R)		
1709401	7/15/2009	<u>                                      </u>	U - Contractor First Aid U - Contractor Days Away From Work Case	Level 1	Lavel 1 Lavel 3b	Two workers were lifting a 40' section of 2' sch 80 pipe to set on jack stands. (Approx. 2004) Work hitlal description rayised per TapRooT investigation report:	Richmond Retainery	Distillation & Reforming (Rich) Distillation & Reforming (Rich)	DER General (Rich)	Other (D&R)		
1850994	71 10/2009	۳	E - Contractor Days Parky Plant Work Dase			On July 15, 2009 at approximately 2:0						
1980391	6/17/2010	Li	U - First Aid	Level 1	Level 2	Record keeping purpose only, no injury at this time - Hearing shift	Richmond Refinery	Distillation & Reforming (Rich)	D&R General (Rich)	Other (D&R)		
1855823	3/15/2010	LI	Lt - Contractor First Aid	Lavel 1		EE putling on face shroud, and felt an insect bile on his chin,	Richmond Refinery	Distillation & Referming (Rich)	DIR West (Rich)	#4 Rheniformer		
1839470	2/16/2010	u	U - Centracior First Aid	Level 1	Level 2	Scaffold builder pinched linger between a monorail and catwalk handrai, while lowering the monorail	Richmond Relinery Richmond Relinery	Distiliation & Reforming (Rich)	D&R West (Rich)	#4 Rheniformer		
1878274	3/25/2010 8/4/2009	NLI	U - Equipment Falkire NLI - Release	Level 1 No Level Selected	Level 1	EE's were lorquing bottom flange on R-3560 using a 17/8" tensioner, The tensioning head has a rating Two PTS employees were working near R-3550 (approximately 20-30 feet away) during catalyst loading.	Richmond Refinery	Distillation & Reforming (Rich) Distillation & Reforming (Rich)	OSR West (Rich)  DAR West (Rich)	#4 Rheniformer #4 Rheniformer		
1853807	3/4/2010	NLI	NLI - Resease NLI - General Liability	No Level Selected	Level 1	Alop the reactor R-3560 white using a 1 inch drive impact, the THOR fitting came unacrowed from the	Richmond Refinery	Distillation & Referming (Rich)	D&R West (Rich)	#4 Rheniformer	<b>1</b>	
1878240	3/23/2010		NLI - Non-Compliance Company Policy	No Level Selected	Level 2	Near Loss, Falling scaffold plank from 25°, Two employees were working on a scaffolding lenguing a f	Richmond Refinery	Distillation & Reforming (Rich)	D&R West (Rich)	#4 Rheniformer		
1878240	3/23/2010	NLI	NU - Non Comptance	No Level Sciected	Level 2	Near Loss, Faking scaffold plank from 25', Two employees were working on a scaffolding torquing a f	Richmond Refinery	Distillation & Reforming (Rich)	D&R West (Rich)	#4 Rheniformer		
1871779	3/20/2010		NLI - General Liability	No Level Selected	Lovel 1	Radiography was being set-up to perform during morning 4 Rhenifermer shift change window without SO	Richmond Refinery	Distillation & Reforming (Rich)	D&R West (Rich)	#4 Rheniformer		
1860473	3/10/2010		NLI - General Liability	No Level Selected	Lovel 1	6" line falled downstream of V-3599 during clean up on the 2010 4 Rheniformer SrD. Fallure appears  Mi conducting vibration check on P-3553A (lube of pump for K-3550), Operations switched pumps from	Richmond Refinery Richmond Refinery	Distillation & Reforming (Rich) Distillation & Reforming (Rich)	D&R West (Rich) D&R West (Rich)	#4 Rheniformer		·
2024056 1894323	9/8/2010	NU U	NLI - Plant Run Out/Slow Down LI - Business Interruption	Lavel 1	Level 1	The H2 reduction was completed this evening, Once H2 was introduced, we have to complete an H2 leak	Richmond Refinery	Distillation & Reforming (Rich)	DAR West (Rich)	#4 Rheniformer		
1591331	8/13/2009			Level 1	Level 1	Delay in start up of the 4Rheniformer, it was shirtdown for a planned regen and dump and screen of R-	Richmond Refinery	Distillation & Reforming (Rich)		#4 Rheniformer		
1995326	5/2/2010	Li	Li - Equipmen/Unit Trip	Level Z	Level 2	TOP INVESTIGATION-K-3550 TRISEN ISSUES-On M1/10, at 15pm, the CBO for the 4 Rheniformer Plant, re	Richmond Refinery	Distillation & Reforming (Rich)	DER West (Rich)	#4 Rheniformer		
1851440	3/9/2010	u	LI - Equipment Damage	Level 1	Level 1	TOP REPORT-HYDRAULIC JACK FAILED-On March 9th, 2010, during a planned shutdown, there was a contra	Richmond Refinery			#4 Rheniformer		
1863470	3/14/2010	Li	LI - Contractor First Aid	Level 5	Level 1		Richmend Refinery	Distillation & Referming (Rich)	D&R West (Rich) D&R West (Rich)	#4 Rheniformer #4 Rheniformer		
1872044	3/21/2010	- LI	LI - Contractor First Aid LI - Contractor First Aid	Level 1	Level 1	EE vacuuming sandblast grit inside F-3570, hose bounced, and finger pinched against furnace tube. EE EE was moving a vocuum hose at North side of F-3559/60/70/80, when he dropped hose, and received a sc	Richmond Refinery	Distillation & Reforming (Rich) Distillation & Reforming (Rich)		#4 Rhenitomer	<del> </del>	
1877986	JAKES TO ST	len .	- entioners ( soi tad	1	1	were transfer of the section of transfer and an analysis than a sufficient matches and selecting and an analysis and an analys	1	In account of the control of the control	p	A	J.,	·

							PART AND	LEVEL4 (LEVELS   LEVEL6	
20NTROL DATE OF FORM 1989171 7/25/2010 U	LOSS TYPE U - First Add			NCIDENT DESCRIPTION  FOR INVESTIGATION—PONTENTIAL ARM INJURY—As part of delly duties, the operator working the Caustic	Richmond Refinery	EVEL2 Distillation & Reforming (Rich)	DAR West (Rich)	44 Rheniformer	
			Level 2	On Sunday, March 14th at approximately 11:20am, a Chevron Fixed Equipment Inspector was injured while	Richmond Reficiery	Distillation & Reforming (Rich)	D&R West (Rich)	N4 Rheniformer	
2000700	LI - Equipment/Unit Trip			At 16:56 K-3550 tripped off line. Operations responded and found the Trisend had no power on the pan	Richmond Refinery			14 Rheniformer	
1000000	LI - Contractor First Aid LI - Equipment Falture			EE was baside R-3550, moving scallops, when a C-clamp fell onto his hardhat.  FOP INVESTIGATION-START UP DELAYS-During the commissioning of the 4Rhenillormer Plant (at the Disti	Richmond Refinery Richmond Refinery			4 Rheniformer	
	Li - Spill			One gation of used oil was spilled onto the asphalt around the D&R ABU from a punctured drum by a	Richmond Refinery	Distillation & Reforming (Rich)	D&R West (Rich)	44 Rhenlformer CWT	
1 9/2/2009 NL1	NU - Plant Run Out/Slow Down			Feday at the NHT we had TP-447A trip off line on govner control swings ( under investigation IMI ) a	Richmond Refinery	Distillation & Reforming (Rich) Distillation & Reforming (Rich)		\$5 Naphtha Hydro Treater	
	L) - Plant Run Out/Slow Down L) - Fire/Explosion			TOP INVESTIGATION—FIRE AT #S CAT-E-570B EXCHANGER—This event occurred at the SRheniformer (5 CAT) TOP INVESTIGATION—FIRE AT #5 CAT-E-570B EXCHANGER—This event occurred at the SRheniformer (5 CAT)	Richmond Refinery			45 Rheniformer	
	NLI - Product Quality (Int)			Untreated TKN LVMed to T-634 - During the 7/15/09 RROT call PED heard that white V-451 is out-of-se	Richmond Refinery			15 Rheniformer	
1739759 11/30/2009 U	U - Fire/Explosion			nsulation (indiducto small leak on top side of E-593 (Reboiler). Operations quickly extinguished (	Richmond Refinery	Distillation & Reforming (Rich)		\$5 Rheniformer	
1741923				TOP INVESTIGATION-POSSIBLE BENZENE EXPOSURE-Following an insulation fire due to a small leak on the TOP INVESTIGATION-POSSIBLE BENZENE EXPOSURE-Following an insulation fire due to a small leak on the	Richmond Refinery	Distillation & Reforming (Rich) Distillation & Reforming (Rich)		#5 Rhenilamer	
	L1 - Non-Compliance Company Policy L1 - Plant Run Qu/Slow Down			On August 4th mutine sampling of the 5 Rheniformer recycle gas with a drager revealed a concentrati	Richmond Refinery	Distillation & Reforming (Rich)		#5 Rheniformer	
1659770 10/2/2009 NLI	NEI - Lessons Learned	No Level Selected	Level 1	At 10/2/09, approximate 00:33 hrs. While depressurizing 5 Rhen, outside operations cracked open a va	Richmond Refinery			#5 Rheniformer	
100,077.0	NLI - Safety Systems and Reflet Devices NLI - Non Compliance - Air			At 10/2/09, approximate 00:33 hrs. While depressurizing 5 Rhen, outside operations cracked open a va Blowing down low points inteped the totalizer, no flare activity seen	Richmond Refinery	Distillation & Reforming (Rich) Distillation & Reforming (Rich)		#5 Rheniformer	
2008730 8/20/2010 NU 1545482 7/7/2009 LI	Li - Fire/Explosion			Work was being performed on leaking exchanger. This was necessary pre-work to prepare exchanger for	Richmond Refinery	Distillation & Reforming (Rich)		#5 Rhenifarmer	
1575833 7/15/2009 NLI	NLI - Product Contamination (Int)		Level 2	Universed TKN LVMed to T-634 - During the 7/15/09 RROT call PED heard that white V-451 is out-of-se	Richmond Refinery	Distillation & Referming (Rich)		#5 Rheniformer	
1937241 5/26/2010 NLI 1554571 7/17/2009 NLI	NU - Lessons Learned NU - Release			5 Car furnaces (F550/60/7080) tripped to min fires during Manual S/D trip quick test (AP7002). The s  White starting K-242, the DAR firm experienced brief activity, All K-242 valves were immediately ret	Richmond Refinery Richmond Refinery	Distillation & Reforming (Rich) Distillation & Reforming (Rich)		IS Rheniformer Jet Hydro Treater	
133-3311	NLI - Equipment Damage			South of the JHT plot limit. A line labeling sign/board made of phywood in the overhead fell on over	Richmond Relinery	Distillation & Reforming (Rich)		Jot Hydro Treater	
1586451 8/5/2009 LI	LI - Permit Exceedance			F-210 exceeded it's CO 8mh of 400 ppm average for 24 hour period. The JHT was being started up and	Richmond Relinery	Distillation & Reforming (Rich)		Set Hydro Treater	
1000101	LI - NOV - Air LI - Equipment/Unit Trip	Level 1		F-210 exceeded it's CO limit of 400 ppm average for 24 hour period. The JHT was being started up and White bringing up a 2nd Reliaf compressor K-242 on the West side, a high level S/D in V-243 K/O trip	Richmond Relinery Richmond Relinery	Distillation & Referming (Rich) Distillation & Referming (Rich)		Jet Hydra Treater Jet Hydra Treater	
1994494 7/30/2010 U	LI - Release	Level 1		White bringing up a 2nd Reflet compressor K-242 on the West side, a high level S/D in V-243 K/O trip	Richmond Refinery	Distiliation & Reforming (Rich)		Jet Hydro Treater	
1563051 7/18/2009 U	LI - NOV - Air	Level 1	Level 1	We exceeded the CO little V limit on F-210 on Saturday 7/18 and Sunday 7/19. The 24 hours averages ca	Richmond Relinery	Distillation & Reforming (Rich)		Jet Hydro Treater	
1695442 10/10/2009 EI 1987502 7/19/2010 NLI	LI - Equipment Failure NLI - Safety Systems and Relief Onvices			Pump could not be put in service due to shaft setzing while heating up for alignment. Pump was remov TOP INVESTIGATION—FSC CHOPPER TRIP-On July 19th, 2010, the Jet Hydrotreater Plant experienced a to	Richmond Relinery Richmond Relinery	Distillation & Reforming (Rich) Distillation & Reforming (Rich)		Jet Hydro Treater Jet Hydro Treater	
1987502 7/19/2010 NLJ 1808826 1/31/2010 NLJ	NLI - Lessons Learned			GM/g Lessons Learned - APIG12 work for TK-200. TK-200 is the steam furbline driving the Jet Hydrotrea	Richmond Relinery	Distillation & Reforming (Rich)	D&R West (Rich)	Jet Hydro Trazier	
1629391 9/10/2009 LI	U - MVC - Company	Level 1		EE, was moving a welding between Debru and the cooling lower and made contact with a yellow pole.	Richmond Refinery	Distillation & Referming (Rich)		LSFO CWT	
1926393 5/15/2010 NLI 1829759 2/17/2010 NLI	NU - Lessons Learned NU - Equipment Damage	No Level Selected No Level Selected		Al approximately 10:36 A.M. on May 15th, the temperature on the 2nd stage #1 cylinder for K-900 Hydr K900A 2nd stage valves got hot and during the switching the machine with hot valves the stop switch	Richmond Refinery Richmond Refinery	Ostification & Reforming (Rich)  Distillation & Reforming (Rich)		LSFO H2 Booster LSFO H2 Booster	
1680491 10/19/2009 NLJ	NLI - Release	No Level Selected	Level 1	Head Operator and Plant Operator were getting K-900A ready for blinding. Once compressor was isolate	Richmond Refinery	Distillation & Reforming (Rich)	D&R West (Rich)	LSFO H2 Booster	
1538406 7/5/2009 MILI	NLI - Equipment Damage			West side apa received an alarm for a hot valve on K-900A second stage (4171010). The temperature h	Richmond Relinery	Distillation & Reforming (Rich)		LSFO HZ Booster	
2015540 8/21/2010 日 2023718 9/5/2010 日	LI - Business Interruption LI - Equipment Failure	Level 1 Level 1		V-970 had a crust layer at the top of the chlorido adsorbent bod that would not come out of the dump  On Sunday Segtember 5th, K-900A was out back in service after completion of compressor frame bolt re	Richmond Relinery Richmond Relinery			LSFO H2 Booster LSFO H2 Booster	
1568256 7/28/2009 LI	Li - Equipment Panage	Level 1	Lavol 1	A company employee parked a leased pickup on Furnace St facing north on east side of road and shut o	Richmond Relinery	Distillation & Reforming (Rich)	D&R West (Rich)	Other (D&R West)	
1588256 7/28/2009 U	LI - MVC - Company	Level 1		A company employee parked a leased pickup on Furnace St facing north on east side of mad and shut o	Richmond Relinery	Ostiliation,& Reforming (Rich) Hydro Processing (Rich)		Other (D&R West)	
1879765 3/25/2010 LI 1927354 4/30/2010 LI	Li - Non-Industrial Li - First Ald	Level 1		RLOP EE Non Industrial: EMT's responded to Hydro control room for Operator complaining of chest pal.  Record Resping purpose only, no injury at this time - Hearing shift.	Richmond Relinery Richmond Relinery	Hydro Processing (Rich)		Hydra Processing Control Center	
2021770 9/4/2010 NLI	NU - Fire/Expission			At 18:25 9/4/10 is small the was policed burning inside of 475 platform (just outside of the HPCC No	Richmond Relinery	Hydro Processing (Rich)	Hydro Processing General	Hydro Processing Control Center	
1984347 7/20/2010 L1	Li - Contractor First Ald	Level 1	Level 1	ERS employee was installing a tray of Potassium Permanganata H2S filtration media in the HPCC. While	Richmond Relinery Richmond Relinery	Hydro Processing (Rich)		Hydro Processing Control Center	
1927410 4/30/2019 LI 1891208 4/6/2010 LI	LI - Non-Industrial LI - First Aki	Level 1		Record keeping purpose only, no injury at this tima - Hearing shift.  Operator came to work with slight eye infitation. Operator was working on the North Isomax control b	Richmond Relinery	Hydro Processing (Rich) Hydro Processing (Rich)		Hydro Processing Control Center Hydro Processing Control Center	
1605660 8/25/2009 LL	U - Safe Operating Limit (SOL) Exceeded	Level 1	Level 2	On night shift of 8/25/09 - Loss of C-730 18A tray caused P-734 pump to loose suction. This caused N	Richmond Relinery	Hydro Processing (Rich)	North Isomax (Rich)	GRU 7	
1813716 2/3/2010 NLI	NLI - Lessons Leamed			At about 3:30 pm today, - contract employee is working on vessell V-7344, before starting his wor	Richmond Relinery Richmond Relinery	Hydro Processing (Rich)		GRU 7	
1605476 8/25/2009 LI 1815944 2/5/2010 LI	LI - Equipment Failure LI - First Aid with Medical Reformal	Level 1	Level 1 Level 3a	At start of right shift, Operations became concerned about H2S coming from the K-734'S, K-734B had   Operator felt through gracing at K-734A white performing routine operator duties. The operator repo	Richmond Relinery	Hydro Processing (Rich) Hydro Processing (Rich)		GRU 7	
1686032 10/23/2009 NU	NU - Equipment Damage		Level 1	GRU7 Light Gas sample station began to spray from NACT fitting white pulling a sample. The fitting	Richmond Refinery	Hydro Processing (Rich)		GRU 7	
1796708 8/18/2009 LI	LI - Contractor First Aid	Level 1	Level 1	TapRoot Investigation - TKN E757 H2S exposure; Circle reported that a Flour EE performing Fire Wat	Richmond Refinery	Hydro Processing (Rich)		GRU 7	
157 6/17/2010 LI 11 3/5/2010 LI	Li - Permit Exceedance Li - Release	Level 1	Level 1 Level 2	77P1759 plugged causing a false lower pressure Indication on C750 over head pressure, thus Opening t Operators were preparing to blind the first stage pulsation bottle for K-734. The safety operator on	Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)		GRU 7	
50 3/23/2010 U	LI - Non-Industrial	Level 1	Lavel 1	EE was working in V-640 setting up heat mats when he felt lill. Symptoms experienced were neusea, cou	Richmond Relinery	Hydro Processing (Rich)	North (somax (Rich)	SO 6	
→099 4/9/2010 L3	Li - Fire/Explosion Li - First Aid	Level 1		P-601A incipient insulation fire: Outer Smoldering insulation on discharge stop-check valve of P-60	Richmond Relinery Richmond Relinery	Hydro Processing (Rich) Hydro Processing (Rich)		ISO 6	
1874159 3/22/2010 LI 1568393 7/25/2009 LI	LI - Operational Loak			At approximately 2300 an operator in the North Isomax shutdown bumped his head on a horizontal stagl On July 28th at around 7pm the process flow through E-620, F620 and R-620 was turned off. There was	Richmond Relinery	Hydro Processing (Rich)		SO 6	
1816490 2/6/2010 LI	LI - Equipment Failure	Level 1	Level 2	- 1135 hrs on 2-6-10 D Crew North Isomax	Richmond Refinery	Hydro Processing (Rich)		SO 6	
1845726 2/28/2010 LI 1860535 3/10/2010 NLI	Li - Operational Leak NU - Refeace	Level 1 No Level Selected	Level 3a Level 1	TOP INVESTIGATION—On February 28th at midnight, during a planned shutdown exchanger E-620 located I  At approximately 23:00, raneteen personal H2S monitors went off in the vicinity of ISO 7, F-731. As	Richmond Refinery Richmond Refinery	Hydro Processing (Rich)  Hydro Processing (Rich)		ISO 6	
1860535 3/10/2010 NLI 1863258 3/13/2010 NLI	NLI - Employes Injury	No Level Selected	Level 1	White performing firewarch duties, Contract EE noticed some grinding activities on C-730 above were	Richmond Refinery	Hydro Processing (Rich)		SO 7	
1863508 3/14/2010 MU	NU - Fire/Explosion	No Level Selected	Level 2	Ox/Acetylene bottles left on @ regulator during shift change. Torch leaking in column.	Richmond Relinery	Hydro Processing (Rich)		SO 7	
1603421 8/25/2009 N.J. 1854623 3/5/2010 N.U.	NLI - Operational Loak NLI - Release	No Level Selected No Level Selected	Level 1	During pressure test on K-734 Barter repair, it was found that N2 pressure was not holding. No ext 5 workers were working downwind of a tresh air job being parformed on K-734's, when their personnal	Richmond Relinery Richmond Relinery	Hydro Processing (Rich) Hydro Processing (Rich)		ISO 7	
1891795 4/9/2010 NU	NU - Release	No Level Selected	Level 1	While cleaning up area around P-737 EE's personal H2S monitor activated,	Richmond Refinery	Hydra Processing (Rich)		SO 7	
1890775 4/5/2010 NLI	MLI - Release	No Leval Selected	Level 1	While replacing the gasket on PRO flange leak 3 S/O personnel had their personal H2S monitors activa	Richmond Refinery Richmond Refinery	Hydro Processing (Rich)		\$07	
1854706 2/5/2010 NLI 1854844 3/5/2010 NLI	MLI - Release MLI - Contractor Injury	No Level Selected	Levei 2	Multiple H2S alarm activations (18), Readings and Contract EE names documented and recorded by IH on EE reported to supervisor on OS/Mar/2010 at 2200 hours that on previous shift at approximately 0100	Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)		ISO 7	
1860580 3/10/2010 NCJ	NLI - Release	No Level Selected	Level 1	At approximately 23:00 on 10/Mar/2010, EE experienced symptoms after personal H2S monitor went off i	Richmond Refinery	Hydro Processing (Rich)	North Isomax (Rich)	SO 7	
1855720 3/8/2010 NLI	NLI - Centractor Injury	No Level Sciented	Level 1	On March 8, 2010 approximately 03:10 a Bigge Rigger was unloading a valve from the P-737A piping dem	Richmond Refinery	Hydro Processing (Rich)		SO 7	
1857525 3/9/2010 NLI 1679117 10/15/2009 NLI	NLI - Contractor Injury NLI - Non-Compliance Company Policy	No Level Selected No Level Selected	Level 1 Level 1	During an incident with the evacuation alarms going off in North Isomax, an contract EE working to a Maintenance was seal welding two leaking plugs on TP-737A. Weld not was checked out on 10/14 for the	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)		ISO 7	
1871919 3/19/2010 NLI	NLI - General Liability	No Leval Selected	Level 1	On 3/19/2010 sametime after 10,00 pm it was observed that there was a contractor inside of F-731 wit	Richmond Refinery	Hydro Processing (Rich)	North Isomax (Rich)	ISO 7	
1871919 3/19/2010 NU	NLI - Nen-Compliance Company Policy	No Level Selected	Level 1	On J/19/2010 sometime after 10:00 pm it was observed that there was a contractor inside of F-731 wit	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)		ISO 7	
18914J8 4/5/2010 NLJ 1891457 4/5/2010 NLJ	NLI - Non-Compliance Company Policy NLI - Non-Compliance Company Policy	No Level Selected	Lovel 1 Lovel 1	IX-733 was installed, QC'd and lumed over to Operations. Valve leaked when put into service, result  After releasing ISO 7 back to Operations, it was noticed that a socion of 1-1/2" screwed water pipi	Richmond Refinery	Hydro Processing (Rich)		ISO7	
1891479 4/6/2010 U	LI - First Aid	Level 1	Level 1	After putting burners in service on F-731 an Operator turned to descend the states on the associated	Richmond Refinery	Hydro Processing (Rich)	North Isomax (Rich)	ISO 7	
1694210 4/9/2010 LI	U - Equipment Damage U - Non-Industrial	Level 1	Level 3a Level 1	K-734B Shirldown: During startup of ISO-7, K734B was started up as part of normal procedures. Aprox  At 0810 it was reported to Chevron Safety that a contractor EE was having a nose bleed that he was u	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)		SO 7	
1879065 3/25/2010 LI 1853580 3/4/2010 LI	☐ - Non-Industrial ☐ - Safety Systems and Relie! Devices	Level 1	Level 1	At 0310 a was reported to Chevron Safety that a contractor EE was having a nose bleed that he was u  Two EE's, one Chevron, and one Contract had their H2S monitors activate in the vicinity of Iso 7. Me	Richmond Refinery	Hydro Processing (Rich)		ISO 7	
1890691 4/5/2010 U	Li - First Ald	Level 1	Level 2	EE was inspecting completed work performed on a leaking flange when they were exposed to H2S from an	Richmond Refinery	Hydro Processing (Rich)	North Isomax (Rich)	ISO 7	
1889596 4/3/2010 U	LI - Contractor First Aid	Level 1	Level 1	White performing an inspection of pumps in ISO-7 a contract employee felt a particle of dust enter!	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)		SO 7	
1824352 2/13/2010 LI 1883482 3/29/2010 LI	LI - Product Quality (Int) LI - Contractor First Aid	Level 1 Level 1	Level 1 Level 1	During the raising of TKN from 30K to 50K feed rate the Jet product was off fest on the freezo  Contractor was working on C-730 pulling up insulation boxes to a scaffold deck with a rope. Contract	Richmond Refinery	Hydro Processing (Rich)		ISO 7	
1597104 8/19/2009 LI	LI - Equipment/Unit Trip	Lavei 1	Level 1	ISO-7 Loss of K734's: During start up of GRU-7 level indication of V731 (LI737) went suspect after	Richmond Refinery	Hydro Processing (Rich)	North Isomax (Rich)	ISO 7	
1892654 4/7/2010 U 1871616 3/18/2010 U	LI - First Aid Li - Safe Operating Limit (SOL) Exceeded	Level 1	Level 2	EE was climbing down a roll-around tadder and as he stepped off the bottom step onto the pavement, h  During a beginning of E-2334 a tube often that out of its mannetive tube, because discrete a small	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)		ISO 7	
1871516 3/18/2010 LI 1854663 3/5/2010 LI	LI - Sare Operating Dmit (SOL) Exceeded	Level 1	Lovel 1	Ourling a hydrotest of E-733A a lube plug shot out of its respective lube, bounced across a small Contract EE working in his work shop area, was using a wheel wheel to clean a valve when he complain	Richmond Refinery	Hydro Processing (Rich)		ISO 7	
1899563 4/17/2010 LI	Li - Equipment Damage	Lavel 2	Level 3a	C730 Jet Line Leak: At 4am this morning a field operator noticed smoke wisping from underneath insu	Richmond Refinery	Hydro Processing (Rich)	North Isomex (Rich)	ISO 7	
1583254 7/19/2010 Li 1600362 8/22/2009 Li	LI - Equipmen/Unit Trip U - Equipment Failure	Level 1	Level 2	76ic737 (axed and caused v-731 to carry over resulting in shutdown of k-734a/b. compressors were d On 22/sug/2008, 05:15, North Isomax operators were getting high H2S atarms around K-734 compressors.	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)		ISO 7	
1600362 8/22/2009 LJ 1873712 3/22/2010 LJ	U - Equipment Faiture U - Fire/Explosion	Level 1	Level 1	At approximately 0650 a fire was reported on the east side of C-730 in the pipe rack. Open flame, on	Richmond Refinery	Hydro Processing (Rich)		ISO 7	
1900786 4/15/2010 NLI	NLI - Lessons Learned	No Level Selected	Level 1	EE inadventantly charged an air hose which once was connected to a chipping gun,	Richmond Refinery	Hydro Processing (Rich)	North Isomax (Rich)	N, Iso CWT	
1900601 4/15/2010 NLI 1830940 2/16/2010 NLI	NLI - Lessons Leamed NLI - Spill	No Level Selected	Lovel 1	A Welder was grinding on a pile in a trench while another crew (Civil Crew) was chipping concrete if Sutturic acid leak from a chemical tote located at North Isomax elevated just behind MP-261, (2) Ele	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)		N. 150 CWT	
1830940 2/16/2010 NLI 1628159 9/11/2009 LI	LI - Equipment Failure	Level 2	Level 1	At 19:07 north isomax operators noticed a drop of cooling water pressure. The board operator instruc	Richmond Refinery	Hydro Processing (Rich)		N, Iso CWT	
1812285 2/2/2010 U	U - Contractor First Ald	Level 1	Level 1	TOP INVESTIGATION-WORKER SPLASHED WITH ACIO-Maintanance worker was splashed with acid under his fac	Richmond Relinery	Hydro Processing (Rich)	North Isomax (Rich)	N. Iso CWT	
1536949 2/23/2010 LI	U - Contractor First Aki	Level 1	Level 1	BRAND EMPLOYEE WAS REMOVING A SUPPORT SCAFFOLD IN AN ACID AREA ALL THE PROPER PPE THAT  EE was performing work related to the demolition of an old transformer. He was cutting boils and of	Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)		N, Iso CWT	
73277 3/4/2010 LI '607 9/28/2009 LI	LI - Centractor First Aid LI - Centractor First Aid	Level 1	Level 1	Commedies was in a boomlift 12-15' in elsewition and saw a bolt that needed torqueing on the cools	Richmone Refinery	Hydro Processing (Rich)	North Isomax (Rich)	N, ISO CWT	
5970 A/31/2009 LI	L! - Spis	Level 1	Level 1	The vacuum truck driver passed across a home of underground pipe between RLOP Control Room and the c	Richmond Refinery	Hydro Processing (Rich)	North Isomax (Rich)	N. Iso CWT	
45074 [97147000 ]11	U - Equipment Damage	Level 1	Level 1	This vacuum truck driver passed across a hump of underground pipe between RLOP Control Room and the c	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)		N. Iso CWT	
15970 8/31/2009 L1 1527185 2/16/2010 L1	ILI - Spit	Level 1	Level 2	Temporary acid tote located on staging at the north isomax cooling tower found leaking to grade. Mail				N, (so CWT	

TATALAN TANAN TANA	LOSS TYPE		POTENTIAL LEVEL	(NCIDENT DESCRIPTION	EVEL1	LEVEL2  Hydro Processing (Rich)	North Isomax (Rich)	LEVEL4 Old Control House (N.Iso)	LEVEL5 LEVEL6
		Level 1 No Level Solected	Level 2 Level 1	At around 11:45 a.m. Hydro supervisor was called to the old north isomax controt room for an operato  While exiting trailer EE stepped of plotform and twisted left ankle. EE was checked out by Chevron	Richmond Refinery	Hydro Processing (Rich)	North Isomax (Rich)	Other (N.Iso)	
		No Level Selected		While conducting water washing of the reactor offluent samples the product had to be removed from th	Richmond Refinery	Hydro Processing (Rich)		Other (N.Iso)	
1030740 00372,010		No Level Selected		EE woke up and his shoulder left hurt. Reported to supervisor after safely meeting.	Richmond Refinery	Hydro Processing (Rich)		Other (N.Iso) Other (N.Iso)	
		No Level Selected No Level Selected	Level 1	Two contract EE's (Matrix) reported to NISO SDC that their personal monitor alarmed.  Contra Costa County Health Services Department's Audit follow up review for:	Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)		Other (NJso)	
		No Level Selected		Contra Costa County Health Services Department's Audit follow up review for:	Richmond Refinery	Hydro Processing (Rich)		Other (N.Iso)	
, 7/2/2009 LI		Level 1		Iron Worker had set her grinder off to the side after use. A moment later she shifted her body posit	Richmond Refinery	Hydro Processing (Rich)		Other (N.Iso)	
,41 114-2-4-		Level 1		A worker was chipping concrete when the wind kicked up and he felt dust go into both of his eyes. H  White returning from the lab after reporting his sample results a North Isomax Operator was returning	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)		Other (N.Iso) Other (N.Iso)	
1951496 6/14/2010 U 1535676 7/1/2009 U		Level 1	Level 2	A worker reported that he scraped his hand while moving a welding machine. He stated that he had r	Richmond Refinery	Hydro Processing (Rich)		Other (N.Iso)	
1580722 8/5/2009 LI	LI - MVC - Contractor	Level 1		Bigge Operator was leaving after installing pump near cooling towers. He was not using a spotter, He	Richmond Refinery	Hydro Processing (Rich)		Other (N.Iso)	
11000		Level 1		Operator was sitting at the TKC control board when his neck suddenly tightened and locked up. He imm Contro Costa Fire Department Engine company responded mutual aid to the Richmond Refinery for a pum	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)		Other (N.Iso) Other (N.Iso)	<u> </u>
69364Z   9/24/2009   L1   910410   4/22/2010   L1		Lavel 1		Personal employee's computer was taken to home for intermittent work around a vacation scheduled. T	Richmond Refinery	Hydro Processing (Rich)		Other (N.Iso)	
		No Level Selected	Level 2	While performing an inspection inside of R-421, EE was struck on his right forearm by a tape measure	Richmond Refnery	Hydro Processing (Rich)		TKC 4	
		No Level Selected	Level 1	In an attempt of removal of the heat insulator (sleeve) from inside of the quench nezzle to bed 3 in  The Chevren Tow boy' tractor/trailer was traveling west bound on Isomax St., As the driver of the "	Richmond Refinery Richmond Refinery	Hydra Processing (Rich) Hydra Processing (Rich)		TKC 4	
1861666 3/11/2010 LI 1964467 6/26/2010 NLI	U - MVC - Company  NLI - Safe Operating Limit (SOL) Exceeded	Level 1 No Level Selected	Level 1	NLI is for the increase of reactor sums in TKC. This was caused by the lease of SDA hot DAO. There	Richmond Refinery	Hydro Processing (Rich)	North Isomax (Rich)	TKC 4	
							-4-14	m.a.	
310117 /////2010		No Level Selected No Level Selected		At 04:15 on 11/7/10 the TKC feed valves started swinging 1.5-2.0 KBPD each. The VGO rate to the TKC Machinist were installing MP-455A, Electricians were called to reconnect motor. One electrician work	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)		TKC 4	
		No Level Selected	Level 1	On July 25, 2010 at about 15:25, while operations was completing the job of water washing E-450 and	Richmond Refinery	Hydro Processing (Rich)		TKC 4	
2028511 B/26/2010 LI	U - Equipment Damage	Level 1	Level 1	110 Volts applied to Honeywell FTA card	Richmond Refinery	Hydro Processing (Rich)	North (somax (Rich)	TKC 4	
	U - Operational Leak U - NSR Consent Decree	Level 1		Li 452 level bridal needed to be clean up for work on U.This process involves having a malmenence Description of incident:	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)	North Isomax (Rich) North Isomax (Rich)	TKC 4	
1785275 1/12/2010 LI 1785275 1/12/2010 LI		Level 2	Level 3a	Description of incident:	Richmond Relatery	Hydro Processing (Rich)		TKC 4	
1946089 6/6/2010 LI	U - Equipment/Unit Trip	Level 1	Leval 1	TOP INVESTIGATION—P-455B HIGH VIBRATION TRIP OUT—The weekly water watch of E-550 (Shell/Tube Heat E	Richmond Refinery	Hydro Processing (Rich)		TKC 4	
1677585 10/18/2009 LI	LI - Equipment/Unit Trip	Level 1	Level 2	At 07:30, TKC lost feed. The previous night shift had experienced P-401B feed pump cavitation and in  At 01:30 North Isomax Ho notified STL that an operator made contact with steam tracing and had a bur	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)	North Isomax (Rich) North Isomax (Rich)	TKC 4	
1995306 8/2/2010 LI 1943891 6/2/2010 LI	LI - First Aid LI - Contractor Medical w/o lost time	Level 1 Level 2	Level 1 Level 2	A Catalyst Services crew was working in reactor R-411 at Chevron Richmond Refinery on June 2, 2010.	Richmond Refinery	Hydro Processing (Rich)	North Isomax (Rich)	TKC 4	
1954541 8/16/2010 LI	U - Permit Exceedance	Level 1	Level 2	During Sulfiding of TKCR410/411 reactors, a quench valve was opened in response to cast activity in b	Richmond Relinery	Hydro Processing (Rich)	North Isomax (Rich)	TKC 4	
1571195 7/29/2009 LI		Level 1	Level 3a	TapRoot Investigation - Liquid Carryover Into TKC K-400 Recycle Compressor and Resulting Flaring aft	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)	North Isomax (Rich) North Isomax (Rich)	TKC 4	
1571196 7/29/2009 Li 1571196 7/29/2009 Li	U - Equipment Damage U - Business Interruption	Level 1 Level 1	Level 3a Level 3a	TapRoot Investigation - Liquid Carryover Into TKC K-400 Recycle Compressor and Resulting Flaring aft TapRoot Investigation - Liquid Carryover Into TKC K-400 Recycle Compressor and Resulting Flaring aft	Richmond Refinery	Hydro Processing (Rich)		TKC 4	
1538401 7/4/2009 LI	U - Equipment Faiture	Level 1	Level 1	During TKC start up the level indicators on V-440 and V-450 failed. These instrument (level indicate	Richmond Refinery	Hydro Processing (Rich)	North Isomax (Rich)	TKC 4	UNIAL
1536039 7/1/2009 LI		Level 1	Level 1	Operator Looked up and felt something fell into his eye, Another operator came to assist him to a ey	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)	North Isamax (Rich) North Isamax (Rich)	TKC 4	
1779255 1/4/2010 LI 1562822 7/4/2009 LI		Level 1	Level 1	TKC4 - Bad packing orbit valve on PC4000 mainfold: PC4000 downstream block valve was discovered to The new guided wave radar transmitters gave false high scale readings for level measurements for V-4	Richmond Relinery	Hydro Processing (Rich)		TKC 4	
1581769 7/4/2009 LJ	U - Equipment Fallure	Level 1	Level 1	During the execution of the TKC purity project (reliability scope), the M/U H2 to K-400 suction pipi	Richmond Refinery	Hydro Processing (Rich)		TKC 4	
1033-32	NU - Equipment Damage	No Level Selected	Level 2	P-713 pump was returned to service but prior to startup 2 Improper conditions were found;	Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)	North Isomax (Rich) North Isomax (Rich)	TKC 7	
	NLI - Contractor Injury NLI - Incorrect Product	No Level Selected No Level Selected	Level 1	While walking in plant near east and of P-737 in ISO 7, EE stepped on anchor bolt that was protrucin P-713A APS controller had talled, incorrect replacement was ordered by the P&S Group Planner, Spare	Richmond Refinery	Hydro Processing (Rich)	North Isomax (Rich)	TKC 7	
1687006 10/24/2009 NLI		No Level Selected	Level 1	Followed written procedure of Ening up valves to allow a standby pump (returning from maintanance)	Richmond Relinery	Hydro Processing (Rich)	North Isomax (Rich)	TKC 7	
1872275 3/21/2010 LI	U - Contractor First Aid	Level 1	Level 1	On March 21, 2010 at about 17:30 an contractor got a particle in the eye while being a gate attendan	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)	North (somax (Rich)	TKC 7	
1927757 5/17/2010 LI 1756189 12/20/2009 LI	Li - Non-Industrial Li - Equipment Failure	Level 1	Level 1 Level 2	EE had left III at home prior to reporting to work. After EE arrived at work the discomfort never su  0530 while filling LGO pumps that oil reservoir, area operator smelled HGO in almosphere.	Richmond Refinery	(Hydro Processing (Rich)	North (somax (Rich) North (somax (Rich)	TKC 7	
1587638 B/11/2009 LJ	LI - Equipment Failure	Level 1	Level 1	Operators was switch compressor K-714A to K-714, K-714 had been returned to operators following mino	Richmond Refriery	Hydro Processing (Rich)	North Isomax (Rich)	TKC 7	
1946120 5/6/2010 📙	LI - Equipment Failure	Level 1	Level 1	TOP INVESTIGATION—SAFETY LIFTS ON V-712—An Operator was called to check on a pressure gauge on the	Richmond Refinery	Hydro Processing (Rich)		TKC 7	
1918805 5/5/2010 LJ 1566745 7/27/2009 LJ	LI - NOV - Air LI - Spill	Level 2 Level 2	Level 2 Level 2	FCC analyzer was disrupted by vapor flow from NISO during startup of the NH3 scrubber. No water sea TOP INVESTIGATION-FLARING EVENT/NOX LIMITS EXCEEDED—Flasing occurred for approximately 14 minutes	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)	North Isomax (Rich) North Isomax (Rich)	TKC 7	
45 7/27/2009 LI	LI - Equipment Failure	Level 2	Level 2	TOP INVESTIGATION—FLARING EVENTINOX LIMITS EXCEEDED—Flaring occurred for approximately 14 minutes	Richmond Refinery	Hydro Processing (Rich)	North (somex (Rich)	TKC 7	
14 9/24/2009 L1	LI - Spill	Level 3a	Level 3a	P-713 seal failed which ignited and caused shut down of TKC ( No space available). OWS-4 operator	Richmond Refinery	Hydro Processing (Rich)	North Isomax (Rich)	TKC 7	
y4 9/24/2009 LI	Li - Loss of Containment (LOC) Corp Reportable	Levat 3a	Level 3a	P-713 seal failed which ignited and caused shut down of TKC (No spare available). OWS-4 operator	Richmond Refriery	Hydro Processing (Rich)	North Isomax (Rich)	TKC 7	
1646404 9/24/2009 LI	LI - Fire/Explosion	Level 3a	Level 3a	P-713 seal failed which ignited and caused shul down of TKC ( No spare available). OWS-4 operator	Richmond Refriery	Hydro Processing (Rich)		TKC 7	
1607220 8/24/2009 Lt	LI - Equipment Failure	Level 3a	Level 3a	The TKC Main Fractionator (C-710) everhead temperature experienced a temp excursion for the period b	Richmond Referery	Hydro Processing (Rich)		TKC 7	
1542861 7/7/2009 LI 1967951 6/29/2010 LI	LI - First Aid LI - First Aid	Level 1	Level 2 Level 1	When working at TKC a partical fanded in my left eye, causing discomfort. Went to the refinery clin  Mechanic was welkin through plant when he left a partical enter his eye, He had on his safety glasse	Richmond Retinery Richmond Retinery	Hydro Processing (Rich) Hydro Processing (Rich)		TKC 7	
1852138 3/4/2010 LI	LI - Contractor First Ald	Level 1	Lovel 1	Delta Tech employee moving down a ladder when a particle was blown around his safety glasses and int	Richmond Relinery	Hydro Processing (Rich)	North Isomax (Rich)	TKC 7	
1627750 8/24/2009 LI	LI - Product Quality (Int)	Level 1	Lovel 1	Between 8/24 2AM and 8/26 9AM, T-1798 jet tank was being filled. When the tank was attempted to be	Richmond Refinery	Hydra Processing (Rich) Hydra Processing (Rich)		TKN 5	
1550320 7/22/2009 NLI 1855704 3/3/2010 NLI	NLI - Plant Run Cut/Slow Down NLI - Contractor Injury	No Level Selected No Level Selected	Level 1	loss of mp-S10 suc; while doing a pump swap on to-S10 to mp-S10 the pump lost section, these pumps On March 8, 2010 approximately 01:30 Koch Plant Specialty EE's were working on replacing a step blin	Richmond Refinery Richmond Refinery	Hydro Processing (Rich)		TKN 5	
1857219 3/8/2010 NLJ	NLI - Release	No Level Salected	Level 1	Contractor EE cleaning out V-550 had a personal H28 monitor go off, EE notified supervisor who then	Richmond Refinery	Hydro Processing (Rich)	North Isomax (Rich)	TKN 5	
	NU - Contractor Injury	No Level Selected	Level 1	Contractor EE cleaning out V-550 had a personal H2S monitor go off, EE notified supervisor who then	Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)	North Isomax (Rich) North Isomax (Rich)	TKN 5	
1857398 3/9/2010 NLJ 1620002 8/28/2009 NLJ	NLI - Centractor Injury NLI - Equipment Damage	No Level Selected No Level Selected	Level 1	EE went to get in his vehicle and noticed he had cut his left index finger. EE is not sure when or IC-730 Btn sample; Three way valve was replaced with 3/4 inch globe valve, KQ guide was not changed	Richmond Resnery	Hydro Processing (Rich)	<del>}</del>	TKN 5	
2021095 9/2/2010 NLJ	NLI - Contractor Injury	No Level Selected	Level 1	Particle in the eye as the EE was removing debris from E-S30 stud holes using an air hose. EE was we	Richmond Refinery	Hydro Processing (Rich)	North Isomax (Rich)	TKN 5	
2030167 9/17/2010 NLJ		No Level Selected	Lavel 2	R-530, Falling tool from top of reactor, At the end of shift, a Contract EE test control of a tool h	Richmond Relinary Richmond Relinary	Hydre Processing (Rich)		TKN 5	
2035727 9/23/2010 NLI 1883567 3/28/2010 LI	NLI - Operational Leak	Na Level Selected Level 1	Level 1	At approximantely 2:30 A.M. on Friday Sept 24th, while Performing the 2000lb leak check on R-530 re White performing shutdown related work, A North Isomax operator bumped his right elbow on a staging	Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)	North Isomax (Rich) North Isomax (Rich)	TKNS	
2036582 9/25/2010 LI	LI - Incorrect Volume	Level 1	Level 1	Discrepancy in violume of DMDS delivered to TKN for sulfiding of R-530. The totalizer flow on the de	Richmond Refinery	Hydro Processing (Rich)	North Isomax (Rich)	TKNS	
1898569 4/15/2010 LI	LI - First Ald	Level 1	Level 1	Pinched Thumb while opening isolation block valve. Operator was unblocking an isolation block valve	Richmond Refinery	Hydro Processing (Rich)		TKN 5	
2030450 9/18/2010 U 1599224 8/21/2009 U	LI - Fire/Explosion LI - Equipment Failure	Level 1 Level 3a	Level 2 Level 3a	On the morning of Saturday September 18, 2010, during the unplanned R-530 Catalyst Change Shindown, TapRoot Investigation - (Loss of K500) At approximately 0130 the North Isomax workstation 3 operator	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)	North Isomex (Rich) North Isomex (Rich)	TKN 5	
2040374 9/28/2010 LI	U - Ralease	Level 1	Level 1	Leak found on R530 bad 5 quench controller 74tcv535. Steam lance put on leak to mitigate fire poten	Richmond Refinery	Hydro Processing (Rich)	North Isomex (Rich)	TKN 5	
2040374 9/28/2010 U	LI - Loss of Containment (LOC) Tier 2	Lzvel 1	Level 1	Leak found on R530 bad 5 quench controller 74tcv536. Steam lance put on leak to mitigate fire poten	Richmond Refinery	Hydro Processing (Rich)	North Isomax (Rich)	TKN 5	
2012009 8/24/2010 LI 2017152 8/26/2010 LI	LI - Contractor First Aid LI - Non-Industrial	Level 1	Level 2 Level 1	Contract EE working as hole watch person for 2 fellow workers wet dumping spent catalyst from Reacto At the end of his shift, Contract EE started to feel a watching sonsation in his fingers. He report	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)	North Isomax (Rich) North Isomax (Rich)	TKN 5	
1874358 3/22/2010 U	LI - Contractor First Aid	Level 1	Lavel 1	Employee was carrying some material, walking around quite a bit, Employee was seen holding his chest	Richmond Refinery	Hydro Processing (Rich)	North Isomax (Rich)	TKN 6	
1880915 3/26/2010 LI	LI - Contractor First Aid	Level 1	Level 1	Amund 1400 hrs a contract EE felt a particle enter their eye possibly from a truck who passed them	Richmond Refinery	Hydro Processing (Rich)	North Isomax (Rich)	TKN 5	
1556649 7/20/2009 NLI	NLI - Equipment Damage	No Level Selected No Level Selected	Level 1	TOP INVESTIGATION—PERSONNEL STUCK IN ELEVATOR—Three contract employees were mobilizing their equip  T-3107, which contains 000R from the HNF unit, did not final for appearance only. A test for residu	Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)	RLOP (Rich) RLOP (Rich)	HNF HNF	
1695804 10/29/2009 NLI 1766462 12/20/2009 NLI	NLI - Product Quality (int) NLI - Equipment Damage	No Level Selected	Level 1	Near loss: loss of feed to plant for 8 minutes.	Richmond Refinery	Hydro Processing (Rich)	RLOP (Rich)	HNF	
2003160 B/12/2010 U	LI - Equipment/Unit Trip	Lavel 1	Lavel 1	At 1523 hrs, Heavy Neutral Hydrofinisher recycle hydrogen compressor shutdown alarm 86UA864 came on	Richmond Refinery	Hydro Processing (Rich)	RLOP (Rich)	HNF	
1754802 12/10/2009 LI	Li - Equipment/Unit Trip	Level 1	Level 1 Level 2	At 13:25 on Thursday, December 10th, HNF (16pt) H2 recycle compressor (K-1600) tripped on a suction WHILE INSTALLING BUINDS AT P-1601B, MECHANIC WAS LOOSENING STUDS ON 1 1/2" 2500# FLANGE	Richmond Relinery Richmond Relinery	Hydro Processing (Rich) Hydro Processing (Rich)	RLOP (Rich)	HNF	
1802694 1/26/2010 LJ 1978775 7/13/2010 LJ	LI - Daya Away From Work Case LI - Equipment/Unit Trip	Level 2 Level 1	Level 1	RLOP Operators we prepalring to switch P-1655 and P-1635 pumps for maintenance. These bottoms pumps	Richmond Rainary	Hydro Processing (Rich)	RLOP (Rich)	HNF	
1974968 7/7/2010 LI	⊔ - Equipment/Unit Trip	Level 1	Level (	TOP INVESTIGATION-P1835 PUMP SWAP ISSUES (Also reference IPS # 1978775); On July 7th, 2010, the Hea	Richmond Refinery	Hydro Processing (Rich)	RLOP (Rich)	HNF	
1575705 B/1/2009 LI	LI - Contractor First Aid	Lavel 1	Level 2	EE was hit by the chain from a chain fault in the hard hat and slightly down his right arm causing a	Richmond Refinery Richmond Refinery	Hydro Processing (Rich)	RLOP (Rich) RLOP (Rich)	HNF	
1589757 7/21/2009 LI 1582387 8/6/2009 LI	LI - Abnormal Supply Occurrence LI - First Ald	Level 1	Level 1	New 2.4 KV Electrical equipment ordered for the P-1601 Replacement project had several fai-up proble  During the RLOP shyddown, as the operator was walking through path in HNF, maintenance pulled on a h	Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)	RLOP (Rich)	HNF	
1816303 2/5/2010 LI	LI - Business (nterruption	Level 1	Level 1	C-1650 600R product was routed off lest. The column was upset do to the selected level indicator gol	Richmond Refinery	Hydro Processing (Rich)	RLOP (Rich)	HNF	
1600272 2/22/2009 LI	LI - First Aid	Level 1	Level 1	Operator was using a steam lance on K-1500 and accidently moved his hand from the steam lance handle	Richmond Refinery	Hydro Processing (Rich)	RLOP (Rich) RLOP (Rich)	HNF HNF	
1537958 7/3/2009 LJ 1559856 7/7/2009 NLJ	Li - Product Quality (Int) NU - Release	Lovel 1 No Level Selected	Lavel 1 Level 1	HNF Off test product Pour point: At 18:30hrs the HNF Bitms stream (600R) was routed Off test due HNC R-1410 inlet companion flange leak during recycle cool down (3009 RLOP Tumaround).	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)	RLOP (Rich)	HNC	
1594529 8/17/2009 NU	NU - Release	No Level Selected	Level 1	HNC flare event:	Richmond Refinery	Hydro Processing (Rich)	RLOP (Rich)	HNC	
2022359 9/6/2010 NU	NLI - Equipment Damege	No Level Selected	No Level Selected	Al Approx. 12:16 K-1400 started surging. At approx 14:10 the compressor started surging to the point	Richmond Refinery	Hydro Processing (Rich)	RLOF (Rich)	HNC	
925 8/12/2009 NLI	NLI - Equipment Camage NLI - Contractor Injury	No Level Selected No Level Selected	Level 1	TOP INVESTIGATION- ELEVATOR MALFUNCTIONED—At approximately 21:00 has two contractors ascended the TOP INVESTIGATION- ELEVATOR MALFUNCTIONED—At approximately 21:00 has two contractors ascended the	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)	RLOP (Rich) RLOP (Rich)	HNC	
926 8/12/2009 NL1 307 8/5/2009 LI	LI - Fire/Explosion	Level 1	Level 1	While stripping 12" S.S. water quench piping at 1600 degrees, resistance heater leld on top of tharm	Richmond Refinery	Hydro Processing (Rich)	RLOP (Rich)	HNC	
,2911 8/16/2009 LI	Lt - Equipment/Unit Trip	Level 1	Level 1	R-1410 and R-1411 Catalyst soak and flush before Suffiding.	Richmond Refinery	Hydro Processing (Rich)	RLOP (Rich)	HNC	
1744193 12/3/2009 U	LI - Plant Run Out/Slow Down LI - Contractor First Aid	Level 1	Level 1	K1400 Lube Oil/Seat Oil Issues: Reducing HNC feed for K1400 (possible) seat failure  EE reach into the machine grabbed piece of steel, the material cut threw EE's gloves and cut index	Richmond Relinery Richmond Relinery	Hydro Processing (Rich) Hydro Processing (Rich)		HNC	<del></del>
1582618 8/6/2009 LI	G - Contractor First MB	m= 761 3	1247671	1-4 But his historic Amorea hiore at sirent six tierritation of threat err 3 dies on sent serger	Transment resident	page - Test samp (comp	1	1	1

							I FIFT 4 - 1	CITE A day remains and other to students to day of the contract	CVE 17	FILE 4	I EVELS
	120F FOE 2010 (LI	Y SEE LO			POTENTIAL LEVEL	ICIDENT DESCRIPTION using day shift on August 5, 2016, Process Control Engineering and Process Engineering were trouble		LOVELY Hydro Processing (Rich)		LEVEL5 HNC	[LEVEL6
	2010					leak was discovered on the HNC V-1410-20 sour H20 line at the cracker bouncry just upstream of an	Richmond Refinery	Hydro Processing (Rich)	RLOP (Rich)	HNC	
1556851 7/19	9/2009 NLI					in Saturday July 19 at 14:00 operations noticed C-1550 inlet flange leaking process. This was durin	Richmond Refinery			HND	
	1/2010 Li			Level 1		oss of instrument air supply to controller for Feel Gas for F-1500 and A&B chapper valves on Fuel & oss of instrument air supply to controller for Feel Gas for F-1500 and A&B chapper valves on Fuel &	Richmond Refinery Richmond Refinery			HND	
	1/2010 LI 1/2009 NILI					-3164 was off-lest on cold crank viscosity for the 100R run that ended on 9/7/09. The measured CCV	Richmond Refinery			LNF	
	30/2009 NLI	Nt.		No Level Salectad		NF - K1300 slowed down; chapped F1310 to min, fire an low low H2 flow. Suspected cause was wet 40#	Richmond Retirery			LNF	
	1/2010   NL			No Level Selected			Richmond Refinery Richmond Refinery			LNF LNF	
1812179 2/16 1865748 3/15	72010 NU 5/2010 NU					he RLOP Light Neutral Finisher was on a 7R UCSO run from 1/29/10 at 120:0 to 2/1/10 at 00:00 (2.5 d oss of P-1360A (Hot Oil Pump):	Richmond Refinery			LNF	<u> </u>
	5/2010 MLI					NAC mechanic was called out to repair a chiller at the LNF. The mechanic did not have an operator s	Richmoné Refinery	Hydra Processing (Rich)	RLOP (Rich)	LNF	
1867613 3/16	5/2010 NLI					uring dayshift, plant operators noticed LNF stand-by feed pump was cold. Operations opened warm-up	Richmond Refinery			LNF LNF	
	2/2010 NU 8/2010 LI		I - Release - First Aid	No Level Selected Level 1		nuning the LNF startup the level in the High Pressure Separator dropped and the level control valve LOP Operator was walking to collect a 2 side cut sample while he was walking past the 4 side cut pu	Richmond Refinery Richmond Refinery			LNF	
	13/2009 LI					NC recycle gas compressor K-1190 was automatically shuldown due to a high vibration reading on the	Richmond Refinery		RLOP (RIch)	LNF	
1312205 1/11	1/2010 U			Level 1	Level 3a	pin-hole loak developed on the boller leed water line attached to V-1375 in 13 plant in RLOP. This	Richmond Refinery			LNF	
	1/2010			Level 1 Level 1		pin-hole leak developed on the boiler feed water line attached to V-1375 in 13 plant in RLOP. This  NF Off Test Product Pour Point - At 18;40hrs the LNF Stims stream (Z20R) was routed Off test due	Richmond Refinery Richmond Refinery			LNF	
	/2009 LI 4/2010 LI					NF birns off (est on high Pour Point: LNF bottoms (220R) routed off test line due to off-test pour	Richmend Refinery			LNF	
	/2009 LI		- Days Away From Work Case	Level 2		on the meming of July 5th 2009 approx 0900 CFD/EMT were notified of possible injury in Hydro. EE w	Richmond Refinery			LNF	
	4/2010 LI			Lavel 1		Yhile switching to a 220R run in the LNF F-1750 was run with <0.0 GZ for 5 hrs. (From shortly after	Richmond Refinery Richmond Refinery			LNF	
	/20:0 LI					NF recycle compressor K-1300 shutdown due to high turbine vibration. Consequently, system pressure NF recycle compressor K-1300 shutdown due to high turbine vibration. Consequently, system pressure	Richmond Refinery			LNF	
	720:0 U			Level 2		NF reactor feed turnace F-1310 FSC tripped on low gas low during a 220R to 110RLV feed switch. The	Richmond Refinery			LNF	
1902618 4/20	D/2010 LI					on 4/20/10, water-contaminated feed was sent to the LNF during a 220R to 110RLV feed switch. As the	Richmond Refinery			LNF	
	9/2010 U 7/2010 U		- Equipment/Unit Trip - Product Quality (Int)	Level 1 Level 1	Level 2 C	Chopped F1750 on low HC flow due to reducing feed 3K. Didn't lose any product since procedure requires the LNF completed a 110RLV production run on 7/16/10 night-shift. The tank finaled with a VI of 119	Richmond Retinery Richmond Retinery			LVF	
	72009 NILI		J - Lessons Learned	No Level Selected		Auring an SSE audit, Short Service Employee tacked knowledge of LPSA. EE is at devated risk of inj	Richmond Rofinery		RLOP (Rich)	LNC	
1556243 7/18	8/2009 NLI	! N	J - Rejease	No Level Selected	Level 1	OP INVESITIGATION-OVER-PRESSURED RELIEF SYSTEM AT FLARE GAS RECOVERY	Richmond Refinery	Hydro Processing (Rich)		LNC	
	22/2009 NLI		J - Business Process J - Sale Operating Limit (SOL) Exceeded	No Level Selected		On 02/04/2009 Operations generated a Work Request for electrical support to troubleshoot a possible Currently reducing feed in LNC due to a high temperature on E-1256.	Richmond Refinery Richmond Refinery			LNC	
2022356 9/6/	/2010 NU	'I'N	- orie cheients must facil exteesed	No Lava! Salected	į .	The outlet temperature high					
	2/2009 UI		- Operational Leak	Level 1	Level t	OP INVESTIGATION-R1110 TOP INLET COMPANION FLANGE LEAK-While performing a shift test for an entry	Richmond Refinery	* * * * * * * * * * * * * * * * * * * *		LNC	
	5/2010 LI		- Incorrect Product - Permil Exceedance	Level i		This is a loss of approximately 1.6 MB of W110RLV production into the W100 tank.  U15 - Exceedance confirmed - High CO from F-1200 is the main contributor to >1000 ppm due to FG flo	Richmond Refinery Richmond Refinery			LNC	
	5/2009 L1			Lovel 1	Level 2	The LNC Recycle compressor, K-1100, emergency Shutdown activated on 8/24 @ 1:13 PM. Operations made	Richmond Refinery	Hydro Processing (Rich)	RLOP (Rich)	LNC	
1553217 7/1	7/2009 LI	LI	- Fire/Explosion	Level 1	Level 1	NC Fire at E1103 Feed/Bottoms exchanger. E1103 channel to shell side developed a leak and ignited.	Richmond Relinery			LNC	
	/2010 LI		- Equipment Failure - Equipment Failure	Level 1	Level 1	TOP INVESTIGATION—While on an 110RLV (Richmand Low Volatility) specialty run, the Light Neutral Hyd  V roughly 99:50am LNC bottoms P-1255 cayitated. The other pump P-1255A AFS'ed and cayitated also. O	Richmond Relinery Richmond Relinery			LNC	
	6/2010 LI 1/2009 LI		- Equipment Panage	Lavel 1		oss of base oil production due to reducing LNF feed rate, stumping of the LNC, in order to repair (	Richmend Refinery	Hydro Processing (Rich)		LNC	
2014113 8/2	6/2010 LI	니	- Product Quality (Int)	Level 1	Level 1	NC officest throwing off Jet Production Tank T-3190,C-1200 stripper C-1230 level upset caused hea	Richmond Refinery			LNC	
	/2010 Li		- Équipment/Unit Trip	Level 1	Level 1	NC-K1100 shutdown on High Vibration: There has been recent besues with controlling E-1100 (Surfa	Richmond Refinery Richmond Refinery			LND	
	21/2009 NL		U - Product Quality (Int) U - Product Unavailable	No Level Selected No Level Selected		NC jet product off-lest on freeze (high). RLOP K-1297 variable speed drive fan falled, Fan serial land model numbers were not accessible unles	Richmond Refinery	- T 1		UND	
	/17/2009 Lt		- Equipment/Unit Trip	Level 1		(1297 went down on high temp and chopped F1200 and F1250. K-1297 shutdown due to high temperature a	Richmond Refinery	Hydro Processing (Rich)	RLOP (Rich)	LND	
1767688 12	/21/2009 LI		- First Ald	Level 1		As operator was descending stairs on north side of LNO boundary, steam from V-1275 bleed to grade co	Richmond Refinery			LND	
7			Li - Business Interruption Li - Contractor Injury	No Level Selected No Level Selected		A Near Miss ocurred when a 9/16th socket fell from a unknown height off of C-1810. No workers were Engaged in What Work When Injured. Night shift employee was removing old grease fluings and Install	Richmond Relinery Richmond Relinery			Other (RLOP)  Other (RLOP)	
			Li - Contractor injury	No Level Salected	Level 1	During the 3Q09 18 Plant Major Shutdown, a (cda) of (6) API #5 trim (410SS/HF) valves were installed	Richmond Relinery			Other (RLOP)	
			LI - Lessons Learned	No Leyel Selected		Do to the TKC fire on 9/24; the wild naphtha stream to C-1100 (ATCR) was blocked in order to prevent	Richmond Refinery			Other (RLOP)	
			LI - Business Interruption	No Level Selected		Mechanics were installing the bearing tracket on P-1821A. There was a discrepancy noted by the mocha	Richmond Refinery Richmond Refinery			Other (RLOP) Other (RLOP)	
	72/2009 NL 724/2009 NL		LI - Satety Systems and Relief Devices LI - Equipment Damage	No Level Selected No Level Selected		During the clean-up of 19 Plant GRU, the combined relief header to K-1060 and K-1070 FGR compressors During the start up of 18 plant (RLOP 2NH3 H2S) an operator noticed the small stream of sour water s	Richmond Refinery			Other (RLOP)	
			U - Equipment Damage	No Level Selected	Level 1	RLOP's Trainer (vetting a Job Aid) was conducting a field test on GRU-19 propane sample station - di	Richmond Refinery	Hydro Processing (Rich)	RLOP (Rich)	Other (RLOP)	
	VZ0/2009 NL		LI - Lessons Learned	No Level Selected		During the 3009 18 Plant Major Shutdown execution, a new column was ordered from BFM to replace C-18	Richmond Refinery			Other (RLOP)	
			U - Operational Leak U - Safety Systems and Relief Devices	No Level Salected No Level Salected		Employee was verifying Loto of pump in 19 Plant. Pump was returning from shop, While opening bleed while in route to saut down a feed pump p-1601, at 13:00 RLOP lost all radio contact, the portable h	Richmond Refinery Richmond Refinery		RLOP (Rich) RLOP (Rich)	Other (RLOP) Other (RLOP)	
	17/2010 NL		Li - Product Contamination (Int)	No Level Solected		At about 1000H, P1845 is observed to be gassing off and this initiated fluctuation of flow swingin	Richmond Refinery		RLOP (Rich)	Other (RLOP)	
1991405 7/2	28/2010 NL		LI - Non Compliance - Air	No Level Selected		recieved a notice through the RIOP OMC from the ACIG-VOC Inspections group stating that VOC TAG #	Richmond Refinery	Hydro Processing (Rich)	RLOP (Rich)	Other (RLOP)	
	15/2010 NL		LI - Non Compliance	No Level Selected No Level Selected		C" Crew Night shift on 05/15/2010 & 05/16/2010 worked understaffed. While plant start up was in pro The planning of the E-1950 (C-1950 OVHD condensers) water wash job was to take one fin fan out of se	Richmond Refinery Richmond Refinery		RLOP (Rich) RLOP (Rich)	Other (RLOP) Other (RLOP)	
	10/2010 NL 18/2010 NL		U - General Liability Li - Product Quality (Int)	No Level Selected		At 21:10 on September 18, 15 plant C-1820 became unstable. The outlet temperature dropped from 308F	Richmond Refinery			Other (RLOP)	
	14/2009 LI		- Raiazsa	Level 1	Level 2	Ird stage H2 rolease at RLOP upon opening makeup valve to HNC.	Richmond Refinery			Other (RLOP)	
	14/2009 L1		- Equipment/Drift Yrip	Level 1		and stage H2 release at RLOP upon opening makeup valve to HNC.	Richmond Refinery Richmond Refinery		PLOP (Rich) RLOP (Rich)	Other (RLOP) Other (RLOP)	
	23/2009 LI 22/2009 LI		I - First Aid I - Spii	Level 1 Level 1	Level 1 Level 1	During steam out operation of 19 plant clean up. An operator took off his Glove to wipe his brow.  During 18 plant clean up, and checking lines for cleaniness, a blender was opened and a small amoun	Richmond Refinery		RLOP (Rich)	Other (RLOP)	
	723/2009 LI		I - Equipment Faikire	Level 1	Level 2	When we try to give P-1831A to maintenance for repair we find out that the Discharge block valve was	Richmond Refinery	Hydro Processing (Rich)		Other (RLOP)	
1903518 4/2	21/2010 LI		I - Non-Industrial	Level 1		This is for reporting purpose only. An operator reported to work with a discormant in his right was	Richmond Refinery			Other (RLOP)	
	24/2909 LI 26/2009 LI		I - First Aid I - First Aid	Level 1 Level 1		While in the process of opening a 2" block valve located under the reboiler deck of E-1927A&B(valve RLOP Operator Arm Stinger; Operator was hooking up a double block & bleed tree at chest level to st	Richmond Refinery Richmond Refinery			Other (RLOP) Other (RLOP)	
	5/2009 LI	- 1	I - Non-Compliance Government	Level 1	Lavel 1	Operators, while walking a LOTO, noticed what appeared to be a radiation containment box that was la	Richmond Refinery		RLOP (Rich)	Other (RLOP)	
		F	tequirement				Richmond Refinery	Shida Dararika (Blass	O OD (Click)	Other (RLCP)	
	5/2009 LI V27/2009 LI	<u> </u>	I - Non-Compilance Company Policy I - Non-Industrial	Level 1	Level 1 Level 2	Operators, while walking a LOYO, noticed what appeared to be a radiation containment box that was la On Oct 26, 2009 was informed of a possible injury that may have taken place on 09 Oct 2009. Internal	Richmond Refinery			Other (RLOP)	
2039900 9/2	78/2010 LI		I - Contractor First Aid	Level 1	Level 1	Employee reported feeling sick, nausoous, slight headache.	Richmond Refinery	Hydra Processing (Rich)	RLOP (Rich)	Other (RLOP)	
2001515 12	11/2010 LI		I - First Aid	Level 1		Near the end of Tuesday's nightshift, Operator was in the process of empling the recovered solvent t				Other (RLOP) Diher (RLOP)	
	13/2010 LI 1/18/2009 LI		I - Equipment Fallure I - Equipment/Unit Trip	Level 1 Level 2		Operator water flushed P1850 NH3 reflux pump for maintanance work on leaking seal flush tubbing. Op K-1900 is the feed gas compressor for the RLOP Gas Recovery Unit. This compressor takes offgas from	Richmond Refinery			Other (RLOP)	<del> </del>
	16/2009 LI		I - Equipment Damage	Level 1	Lavel 1	TOP INVESTIGATION-P-1845 ELECTRICAL ISSUES	Richmond Rollnery	Hydre Processing (Rich)	RLOP (Rich)	Other (RLOP)	
1933019 5/	722/2010 LI		I - Equipment Failure	Level 1	Level 1	Starting the week of 5/16/10 P1850A started amping out. We have been running without a spare for to	Richmond Refinery			Other (RLOP)	
	730/2010 LI 722/2009 LI		J - Equipment Failure J - Preduct Quality (Int)	Lovel 1	Level 1	E1940 fin fans B & C shutdown due to vibration numerous times. We restarted them and they shutdown The RLOP GRU officesed propone for FC4 and n-C4 at the RAX from ~8/21 17:00 to 8/23 01:00. During	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)		Other (RLOP) Other (RLOP)	
	7272009 LI		J - First Aid	Level 1	Level Ja	RLOP operator was in the RLOP change room at his locker, As the operator was getting up from the ben	Richmond Refinery	Hydro Processing (Rich)		Other (RLOP)	
1920862 5/	///2010 U		i - Permit Exceedance	Lavel 1	Level 1	FCC Yotalizer tripped: Increased flow to the flare triggered the FCC lotalizer. Investigation as	Richmond Refinery	Hydro Processing (Rich)	RLOP (Rich)	Other (RLOP)	
	/17/2010 N		LI - Lassons Leamed	No Level Selected	Level 1 Level 1	Kear Loss - poincilai reduction of reales in RLOP due to loss of cooling.  Fare totalizer at South Jeomax wort off when K-1999 had to be shut down for lube oil leak an coupil	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)		RLOP Flare	
	/10/2009 LI /23/2009 LI		i - Release J - Permit Exceedance	Level 1	Level 1	Hare totalizer at South learnax went off when K-1000 had to be shut down for labe oil look on course increased flow to North yard FGR due to Riop deanup of plants for shutdown.	Richmena Refinery			RLOP Flare	
	725/2010 LI	L	J - Non-Compliance Government	Level 1	Level 1	Loss: Bad order instrumentation; no title V entry; alarm disabled with no turnover / communication.	Richmond Refinery	Hydro Processing (Rich)	RLOP (Rich)	RLOP Flare	
		\F	Requirement		Laurel 3	Contract EE was moving the Scaffeling materials in the yard Wind was blowing , and with the wind h	Richmend Refinery	Hydro Processing (Rich)	RLOP (Rich)	RLCP Flare	
	/3/2009 LI		J - Centractor First Aid VLI - Product Mis-Delivery	Level 1 No Level Selected	Level 2 Level 1	Contract EE was moving the Scalfeling materials in the yard Wind was blowing, and with the wind it Shipment document #10260852 from HUNTSMAN showed a delivery of 45,835 LB. Disthanolamine (DEA) with	Richmend Refinery	Hydro Processing (Rich) Hydro Processing (Rich)	South Isomax (Rich)	10 Plant #4 H2S	
			VLI - Product Mis-Dayvery VLI - Paperwork Incorrect/Not Sent	No Level Selected	Lovel 1	Shipment document #10260852 from HUNTSMAN showed a delivery of 45,835 LB Diathanolamine (DEA) with	Richmond Refinery	Hydro Processing (Rich)	South (somax (Rich)	10 Plant #4 H2S	
1935889 5/	/19/2010 N	LI !	NLI - Non Compfance - Air	No Lavel Selected	Lavel 2	At 18:30 on 5/19/10, the 4H2S hydrocarbon in acid gas analyzer spiked from - 1900 ppm to the range m	Richmond Refinery	Hydra Processing (Rich)		10 Plant #4 H2S	
	/1/2010 LI		J - Equipment Failure	Level 2	Level 2 Level 1	Time was lost during the exection window of 4 H2S. The 4 H2S plant was shutdown for routine API ins instrumentation failure. Tubing connection to regulator failed, Causing PSL 1052 to fail low, Inturn	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)		10 Plant #4 H2S 10,5 Plant Flare Gas Recovery	
			VIJ - Equipment Damage VIJ - Employee Injury	No Level Solected	Love/ 2	TOP INVESTIGATIONCONTRACTOR H2S EXPOSURE-AI 08:07 a Contractor's personal H2S (Hydrogen sulfide)	Richmond Refinery			10.5 Plant Flare Gas Recovery	
1640874 9/	/22/2009 N	ILI	VU - Contractor Injury	No Level Selected	Levei 2	TOP INVESTIGATION-CONTRACTOR H2S EXPOSURE-At 08:07 a Contractor's personal H2S (Hydrogen sulfide)	Richmond Refinery	Hydro Processing (Rich)	South Isomax (Rich)	10.5 Plant Flare Gas Recovery	
			NU - Operational Leak	No Level Selected	Lovel 2	TOP INVESTIGATION-CONTRACTOR H2S EXPOSURE-ALIGS:07 a Contractor's personal H2S (Hydrogen sulfide)	Richmond Refinery	Hydro Processing (Rich)		10.5 Plant Flare Gas Recovery	
			NU - Non Compliance - Air NU - Safety Systems and Relief Devices	No Level Selected	Level 1	South Isomax was water washing E-1051 for plugging during the previous shift and the OWS-2 Operator Flaring Activity: natural gas flaring during shutdown of K300's.	Richmond Relinery Richmond Relinery	Hydro Processing (Rich) Hydro Processing (Rich)	South Isomax (Rich) South Isomax (Rich)	10.5 Plant Flare Gas Recovery 10.5 Plant Flare Gas Recovery	
			VLI - Non Compliance - Air	No Level Selected	Level 2	Hote, this is a continued attorney - client privileged investigation IPS# 1395282.	Richmond Refinery	Hydro Processing (Rich)	South Isomax (Rich)	10.5 Plant Flare Gas Recovery	
1563259 3	V13/2010 L	i (I	.1 - Equipment Damage	Level 1	Lavel 1	Times was asked to support Veolia with the spacing of a flange in order to hydro blast V-1011. Times	Richmond Refinery	Hydro Processing (Rich)		10.5 Plant Flare Gas Recovery	
	/30/2009 L		J - Equipment Failure	Level 1	Level 1	FGR compressors, K-1060 and K-1070 second stage discharge after cooler (Fin Fan E-1052) plugged. Thi K-1060 FGR, compressor slugged with sould which leaked past the platen rings, then past the packing	Richmond Refinery Richmond Refinery			10.5 Plant Flare Gas Recovery  10.5 Plant Flare Gas Recovery	
1593445 3	V14/2010 L	<u> </u>	LI - Equipment Failure	Level 1	Lovel 1	to these trans, complianced suggest with which cover brast to a biation buds, sixed heat the bereing	Transmission transmission	leakana i Indepagnik frama	mount tourists frame)	twing room and the control of the co	·

AGUSTO OF THE STATE OF THE STAT	LOSS TYPE	ACTUALLEVEL	POTENTIAL ( EVEL	NCIDENT DESCRIPTION	LEVEL1	LEVEL?	LEVEL3	LEVEL5	LEVEL6
	LI - Contractor First Aid			The man was using a board that was nearby to move some gravel around to level the wire pulling stand	Richmond Reffrery	Hydro Processing (Rich)	South Isomax (Rich)	10.5 Plant Flare Gas Recovery	
174951B 12/4/2009 L1	Lt - Permil Exceedance			Flaring Activity; Non-Environmental Incident	Richmond Refinery	Hydro Processing (Rich)	South Isomax (Rich)	10_5 Plant Flare Gas Recovery	
1659204 10/1/2009 LI	LI - Fire/Explosion			The state of the s	Richmond Refinery	Hydro Processing (Rich)		10.5 Plant Flare Gas Recovery	
2010244 8/23/2010 LI	LI - Contractor First Aid LI - Contractor First Aid	Level 1	Level 1		Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)		10.5 Plant Flare Gas Recovery 10.5 Plant Flare Gas Recovery	
1858247 3/17/2010 LI 7629 7/11/2009 LI	U - Equipment Damage			Contractor Employee was working by the flare and reported a possible bug bite. CFD was notified and K-1070 Flare Gas compressor trips out on high vibration. Initial instection finds the crankcase has	Richmond Refinery	Hydro Processing (Rich)		10.5 Plant Flare Gas Recovery	
	LI - Equipment Failure		Layel 1	Last night the South Isomax AO-2 operator was in Flare ges recovery and noticed that P-1057A jacket	Richmond Relinery	Hydro Processing (Rich)		10.5 Plant Flare Gas Recovery	
a1 3/5/2010 LL	LI - Equipment/Unit Trip	Loyal 1	Lavel 1	K-1060/70 Shutdown on High Level in V-1050 source of level unknown, OWS 2 received high level alarm	Richmond Relinery	Hydro Processing (Rich)		10,5 Plant Flore Gas Recovery	
J24 3/19/2010 NLI	NLI - General Liabity		Level 1	A LOTO key was lost on the 2010 cluster S/D. When the operators openned the box to unloto 20 Plant,	Richmond Relinery	Hydra Processing (Rich)		20 Plant Hydrogen Recovery	
1000110	NLI - Plant Run Out/Slow Down			Valve 504D, the repressurization valve for Bed 4, failed. It would not open during its cycle to pre	Richmond Refinery	Hydro Processing (Rich)		20 Plant Hydrogen Recovery	
1863257 3/13/2010 LI	LI - Contractor First Aid	Level 1		*Contractor employee complained of sore throat and said there was a lump in throat, CFD checked the	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)		20 Plant Hydrogen Recovery 20 Plant Hydrogen Recovery	
1593299 8/13/2009 U	LI - Business Process LI - Permit Exceedance	Level 1 Level 1		Reinspection of UT scan area on a pressure vissel due to error in interpretation of job requirement.  Hydro Flaring during 20 plant startup:	Richmend Refinery	Hydra Processing (Rich)		20 Plant Hydrogen Recovery	
1894282 4/11/2010 U 1739459 11/30/2009 U	LI - Equipment Fallure	Level 1	Level 1	TOP INVESTIGATION—505B PACKING FAILURE	Richmond Refinery	Hydre Processing (Rich)		20 Plant Hydrogen Recovery	
1926279 5/15/2010 LI	LI - Safety Systems and Relief Devices	Level 1		H2S sensor 69Al202 was activated near V-2070. AO-4 Operator and Head operator observed liquid on pu	Richmond Relinery	Hydro Processing (Rich)		20 Plant Hydragen Recovery	
	NLI - Safety Systems and Relief Devices			Multi-Lim system S/D K-2600 69TI2800 Trip High Moter winding alarm,	Richmond Relinery	Hydro Processing (Rich)		25 Plant Utilities	
20Z9528 9/16/2010 LI	LI - Equipment/Unit Trip		Level 1	TOP INVESTIGATION-	Richmond Refinery	Hydro Processing (Rich)		25 Plant Utilities	
2000268 8/9/2010 U	U - Product Mis-Delivery U - Product Contamination (Int)	Level 1 Level 1		A Naico chemical shipment of EC9254A was misdelivered by the bulk carrier into the Naico Nexguard 22  A Naico chemical shipment of EC9254A was misdelivered by the bulk carrier into the Naico Nexguard 22	Richmond Relinery Richmond Relinery	Hydro Processing (Rich) Hydro Processing (Rich)		25 Plant Utilities 25 Plant Utilities	
2000268 [8/9/2010 LJ 1552745 7/10/2009 NLJ	Nt.J - Permit Exceedance		Level 2	8 plant exceeded the total allowed selenium to the bio reactor.	Richmond Refinery	Hydro Processing (Rich)		B Plant Sour Water Plant	
1786310 12/10/2009 NLJ	NU - Non Compliance - Water	No Level Selected		In the early morning of 12/10, steam was lossed to E-817 reboiler to C-810 H25 shipper column. Thi	Richmond Relinery	Hydra Processing (Rich)		8 Plant Sour Water Plant	
1569443 7/28/2009 NLI	NU - Employee Injury	No Level Selected	Lovel 1	8 Plant Field Operator was requested by OWS#1 to Block in N2 to C-820 and lower the column pressure.	Richmond Relinery	Hydre Processing (Rich)		8 Plant Sour Water Plant	
1856686 3/1/2010 NLI	NU - Product Contamination (Int)	No Level Selected		Loss: High pH in sour water leading to elevated levels of Selectium in stripped sour water from 8 and	Richmond Relinery	Hydro Processing (Rich)		B Plant Sour Water Plant	
1987430 7/23/2010 NUI	NLI - Product Quality (Int)	No Level Selected		At approx 7:15 AM the feed composition in 8-plant changed, first dropping about 1% NH3 concentration	Richmond Relinery Richmond Relinery	Hydro Processing (Rich)		8 Plant Sour Water Plant 6 Plant Sour Water Plant	
1985475 7/20/2010 NLI 1985475 7/20/2010 NLI	NLI - Non Compliance - Water NLI - Product Quality (Int)	No Level Selected		B Plant WWT routed back to tankage. C-810 lost of Indication between Tray 4 & 10, it rapidly decreas  B Plant WWT routed back to tankage. C-810 lost of Indication between Tray 4 & 10, it rapidly decreas	Richmond Refinery	Hydra Processing (Rich) Hydra Processing (Rich)		B Plant Sour Water Plant	
1985475 7/20/2010 NLI 1931541 5/20/2010 LI	LI - MVC - Contractor	Level 1		Contractor EE was parked his truck an F-550 next to a 1500 Pickup Truck. After picking up the perm	Richmond Relinery	Hydro Processing (Rich)		B Plant Sour Water Plant	
2004E05 8/15/2010 U	LI - Equipment/Unit Trip			K-840-A lube oil alarm S/D activated and shut down the compressor resulting in routing overhead NH3	Richmond Refinery	Hydro Processing (Rich)	South Isomax (Rich)	8 Plant Sour Water Plant	
1621410 9/6/2009 U	LI - Product Quality (Int)	Level 1	Level 1	Isomax Prepare want off test while switching Propane driers.	Richmond Relinery	Hydro Processing (Rich)		8 Plant Sour Water Plant	
1892442 4/7/2010 Li	LI - Product Quality (Int)	Level 1		8 Plant SSW routed off-test due to high ammonia content at bioreactor. SSW was black in color and b	Richmond Relinery	Hydro Processing (Rich)		B Flant Sour Water Plant	
1979978 7/15/2010 III 1932315 3/19/2010 III	L1 - Product Contamination (Int)		Level 1 Level 1	Summary.  Contract EE was being monitored (industrial hygiene personal air monitoring) for hexavalors chromium	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)		8 Plant Sour Water Plant 8 Plant Sour Water Plant	
	LI - Equipment Fallure		Level 1	TOP INVESTIGATION-V-820 LEAK-An operator noticed an odor as he was walking through his plant at Sout	Richmond Refinery	Hydro Processing (Rich)		B Plant Sour Water Plant	<u> </u>
2025789 9/12/2010 LI	LI - Product Cluality (Ird)			8 PLANT ROUTED OFF TEST DUE TO UNSTABLE OPERATION IN C-820	Richmond Refinery	Hydra Processing (Rich)	South (somax (Rich)	8 Plant Sour Water Plant	
1671505 3/19/2010 LI	L1 - Contractor First Aid	Level 1	Level 1	Employee was posting as a fire/hole watch for welding job on V-600 in 8 plant. Employee was statione	Richmand Refinery	Hydro Processing (Rich)		8 Plam Sour Water Plant	
2004356 8/13/2010 LI	LI - Product Quality (Int)	Level 1	Level 1	B-Plant C-810 column upset 6:30PM 8/13. DP rose, NH3 indication percentage swung by 1%. Column was	Richmond Relinery	Hydro Processing (Rich)		8 Plant Sour Water Plant 9 Plant Booster Compressors	
	NLI - Contractor Injury NLJ - Operational Leak	No Level Selected No Level Selected	Level 1 Level 2	Walder white setting up for a job and pulling leads in the general vicinity of V-910, felt some limit TOP levestigation: KS40 OIL LEAK TO SEWER	Richmond Relinary Richmond Relinary	Hydra Processing (Rich) Hydra Processing (Rich)		9 Plant Booster Compressors 9 Plant Booster Compressors	
	NU - Equipment Damage	No Level Selected	Level 1	Firewater supply line (10 inch) to 8,9 and 10 Plant has a 1-2 inch hole in line, Located Overhead	Richmond Refinery	Hydro Processing (Rich)		9 Plant Booster Compressors	
	NLI - Lessons Learned	No Level Selected	Level 1	The electric shop was performing PM on MK-950 in South Isamax. The covers were remove to access the	Richmond Relinery	Hydro Processing (Rich)	South Isomax (Rich)	9 Plant Booster Compressors	
1890567 4/5/2010 NLI	NU - Plant Run Out/Slow Down	No Level Selected	Lavel 1	Console operator requested Bossler compressor leading status and reuting status of LSFO hydrogen in	Richmond Relinery	Hydro Processing (Rich)		9 Plant Booster Compressors	
	NLI - Non Compliance - Alf	No Level Selected	Level 1	Operator was blowing level down from V-930 and watching level Indification when he got a call from O	Richmond Relinery	Hydro Processing (Rich)		9 Plant Booster Compressors	=
1889838 4/3/2010 LI 1576919 8/2/2009 LI	LI - Equipment Damage LI - Contractor First Akt	Level 3a Level 1	Level 3a Level 2	TapRooT - S/D of K-930, K-940, & K-960 H2 Boosters due to 1st Stage Cylinder Damage  White exiting a scatfold effer installing a valve for V-9010, EE rolled his right ankle on the un-ev	Richmond Relinery Richmond Relinery	Hydra Processing (Rich) Hydro Processing (Rich)		9 Plant Booster Compressors 9 Plant Booster Compressors	
1576919 8/2/2009 U 1892757 4/8/2010 U	LI - Equipment Failure		Level 1	TOP Investigation: Leaking valve flanges (H2 Service) on K-920,	Richmond Refinery	Hydre Processing (Rich)		9 Plant Booster Compressors	
1677412 10/16/2009 U	LI - Safety Systems and Relief Devices	Level 1	Level 1	White attempting start on K-920, had a no start (2 times). Created work request and during the elect	Richmond Refinary	Hydro Processing (Rich)		9 Plant Booster Compressors	
1564200 7/26/2009 U	LI - Equipment Fallure	Level 1	Level 1	OAt around 14:30 operations noticed a loud knock coming from K-950, Further investigation revealed I	Richmond Refinery	Hydro Processing (Rich)		9 Plant Beaster Compressors	
1691613 10/27/2009 LI	LI - Days Away From Work Case	Level 2	Level 2	Operator was performing housekeeping after a job at T900 in South Isomax. He was placing locks back	Richmond Refinery	Hydro Processing (Rich)		9 Plant Booster Compressors	
1766670 12/18/2009 U	Lt - Equipment Failure Lt - Plant Run Out/Slow Down	Level 1	Level 1 Level 2	Operator was making munds when he noticed leaking at K-910 #5 Cylinder Third stage at a bleeder val Broken isolation valve on the 2nd stage suction of K-950 lead to shutting down both K-950 and K-960	Richment Refinery Richment Refinery	Hydro Processing (Rich) Hydro Processing (Rich)		9 Plant Booster Compressors 9 Plant Booster Compressors	
1647426 8/27/2009 U 1896798 4/13/2010 U	LI - Equipment Failure	Level 1	Level 1	At approximately 8:30 pm last night the CFD responded to S. Isomax Booster Deck K-940 after a 1 1/2"	Richmond Refinery			9 Plant Booster Compressors	
5972 11/13/2009 U	LI - Equipment Fallure	Level 1	Level 1	At 14:00 the south Isomax HO informed the STL of a jacket water leak in the temporary alluminum retu	Richmond Retinery			Plant Boosier Compressors	
290 1/19/2010 LI	LI - Equipment/Unit Trip	Level 2	Lavel 2	TOP INVESTIGATION—Lost 9 PLANT BOOSTER COMPRESSORS	Richmond Refinery	Hydra Processing (Rich)		9 Plant Booster Compressors	
317 4/27/2010 LI	LI - Permit Exceedance	Level 5	Level 1	Flaring Incident from V-930,	Richmond Relinery	Hydro Processing (Rich)		9 Plant Booster Compressors	
.5733 2/28/2010 LI	LI - Equipment Failure LI - Contractor First Aid	Level 1	Level 1 Level 2	Operations was aware that K-930 #1cyl had valves that were getting hot when unloaded and were leakin  Employee bent over staging barto put pick up a box of studs, Fett a pop on his right side of rib ca	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)		9 Plant Booster Compressors 9 Plant Booster Compressors	
1575577 7/31/2009 LI 1892471 4/6/2010 LI	LI - Equipment Faiture	Level 1	Level 1	Steam hose leaked during use on the booster deck white Contractor EE was cleaning parts.	Richmond Refinery	Hydro Processing (Rich)		9 Plant Booster Compressors	
1982269 7/18/2010 L1	LI - Equipment Failure	Level 2	Level 2	K-920 2 nd stage #4 cyl, valves falled 9:58am 7/18. Was over 360 deg, per 63ti9204, Reversed Flow c	Richmond Relinery	Hydro Processing (Rich)		9 Plant Booster Cempressurs	
1537048 7/2/2009 L1	LI - Safety Systems and Relief Devices	Level 1	Level 1	When loading H2 compressor K-930, the 2nd stage PRD lifted due to the D/S discharge block being froz	Richmend Relinery	Hydro Processing (Rich)	South Isomax (Rich)	Plant Booster Cempressors	
1853965 3/4/2010 NU	HLI - Contractor Injury	No Level Selected	Level 1	Due to communication error the dollar plate on E-333A was taken off, therefore making the area an Ar	Richmond Refinery	Hydro Processing (Rich)	South Isomax (Rich)	Hydrogen A Train	
1853965 3/4/2010 NLI	NU - General Liability	No Level Selected	Level 1	Oue to communication error the dollar plate on E-333A was taken off, therefore making the area an Ar	Richmond Relinery Richmond Relinery	Hydro Processing (Rich) Hydro Processing (Rich)		Hydrogen A Train Hydrogen A Train	
.1882374 3/25/2010 NLI :1882374 3/25/2010 NLI	NLI - Incorrect Volume NLI - Lessons Learned	No Level Selected	Level 1 Lovel 1	C-335 had much leftover packing due to incorred drawing dimensions and overloaded sacks from the ma C-335 had much leftover packing due to incorred drawing dimensions and overloaded sacks from the ma	Richmond Relinery	Hydro Processing (Rich)		Hydrogen A Train	
1951800 G/14/2010 NLI	NU - Incorrect Product	No Level Salected	Level 2	TOP INVESTIGATION-ARSENIC INJECTION-On 6/14/2010 at 09:00am, an area operator was instructed to in	Richmond Relinery	Hydro Processing (Rich)	South Isomax (Rich)	Hydrogen A Train	
1631764 9/14/2009 LI	LI - Plant Run Out/Slow Down	Level 1	Level 1	Original estimate for crimping F-305B four leaking tubes was not met, causing an extended delay of H	Richmond Relinery	Hydro Processing (Rich)		Hydrogen A Train	
1631764 9/14/2009 LL	LI - Business Interruption	Level 1	Level 1	Original estimate for crimping F-305B four leaking tubos was not met, causing an extended delay of H	Richmond Refinery	Hydro Processing (Rich)		Hydrogen A Train	
1856840 3/8/2010 LI	LI - MVC - Contractor LI - Contractor First Aid	Level 1	Level 1 Level 1	MVC, Contractor vs. Contractor. A forklift being driven by a Koch EE, backed up and made contact with Employee was removing demister pad from inside V-320 in A train. Demister pad was damaged and stuck	Richmond Relinery Richmond Relinery	Hydro Processing (Rich) Hydro Processing (Rich)	South Isomax (Rich) South Isomax (Rich)	Hydrogen A Train Hydrogen A Train	
1856891 3/19/2010 LI 1890745 4/5/2010 LI	U - Equipment Failure	Level 2	Level 2	A-Train/F-305 C Cell tube leak.	Richmond Relinery	Hydro Processing (Rich)		Hydrogen A Train	
1918302 4/21/2010 LI	LI - Non-Compliance Government	Level 1	Level 1	The following is copied from the 5-Why investigation:	Richmond Refinery	Hydro Processing (Rich)		Hydrogan A Train	
	Requirement		<u> </u>						
1862897 3/12/2010 U	LI - Contractor First Aid LI - Equipment Failure	Level 1 Level 3a	Level 1 Level 3b	3 Contract EE's employees were chipping trays and corners inside of C-335 arsenic regulated area at 1 On February 10, the South Isomax Head Operator discovered a pinhole Hydrogen leak on the 10-inch etb	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)		Hydrogen A Train	
1820803 2/10/2010 LJ 1864569 J/14/2010 LJ	Li - Equipment Damage	Level 1	Level 1	Spectrum Heat Treating were In the process of heat treating the pig tails on F-305, and during the P	Richmond Refinery	Hydro Processing (Rich)		Hydrogen A Train	
1635287 9/14/2009 LI	LI - Non-Compliance Company Palicy	Level 1	Level 1	While ceramic fiber barrier tape was hung for the F-305B tube crimping work, several people were obs	Richmond Refinery	Hydro Processing (Rich)		Hydrogen A Train	
2036605 9/25/2010 LJ	LI - Equipment Failure	Level 1	Lovel 1	South Isomux MEA pump P-332A unexpectedly shuldown resulting in a temporary loss of - 70mmself4 of hyd	Richmond Refinery	Hydro Processing (Rich)	South Isomax (Rich)	Hydrogen A Train	
1851623 3/3V2010 LI	LI - MVC - Contractor	Lovel t	Level 1	Contract EE from one company, struck another Contract companies vehicle causing a minor dem near th	Richmond Refinery	Hydro Processing (Rich)		Hydrogen A Train	
1777320 1/2/2010 U	Lt - Equipment Fallure Lt - Equipment/Unit Trip	Levei 3a Lovel 1	Level 3a	At 09:10 A train Operator was checking F-305 furnace and noticed that there was something not right.  K-300A Amps had started increasing at 20:30, OWS#2 console operator contacted the AO-3 area Operator	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)		Hydrogen A Train Hydrogen A Train	
1976736 7/9/2010 U 1856726 3/8/2010 U	LI - Contractor First Aid	Level 1	Lovel 1	White climbing to the top of C-315, EE raised the folder drop but to exit onto the deck and released	Richmond Refinery	Hydro Processing (Rich)		Hydrogen A Train	
1781699 1/8/2010 U	LI - First Aid	Level 1	Lavel 2	While the EE was performing his duties the EE stood up without seeing an obstruction and jammed his	Richmond Refinery	Hydro Processing (Rich)		Hydrogen A Train	
1628213 9/13/2009 LI	U - Equipment Failure	Lovel 3a	Level 3a	Sequence of events:	Richmond Refinery	Hydro Processing (Rich)	South Isomex (Rich)	Hydrogen A Train	
1702639 11/2/2009 NLI	NU - Product Unavailable	No Level Selected	Level 1	Ordered MEA when 6 Inches left in the MEA supply tank. B Train lean MEA concentration was less than	Richmond Refinery	Hydro Processing (Rich)		Hydrogen 8 Train	
2023668 9/8/2010 NLI	NU - Incorrect Product	No Level Selected	Level 1	R-365 Feed Vent pressure control valve 62PV366 had failed in the open position. Trouble shooting had	Richmond Refinery	Hydro Processing (Rich)		Hydrogen 9 Train	
1920532 5/5/2010 Nt.1 1876352 3/23/2010 LI	NU - Equipment Damage Lt - Equipment Fallure	No Level Selected	Level 1	Near local safety item, slipping hazard due to underground H2O leak south of B train furnace near st  B Tm K-361E Shutdown: At 23:59 hrs K361E forced induced (an shutdown. Several attempts to restart	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)	South Isomax (Rich) South Isomax (Rich)	Hydrogen B Train Hydrogen B Train	
1876352 3/23/2010 U	LI - Equipment Failure	Level 1	Level 1	New packing was installed in the field on P-361 and didn't have sufficient water leakage for lubrica	Richmond Refinery	Hydro Processing (Rich)		Hydrogen B Train	
1958461 6/21/2010 LI	LI - Equipment/Unit Trip	Level 2	Level 2	Boiler Feed water pump TP-360A on Hydrogen B-train had a governor failure with B-train Mp-350 BFW p	Richmond Relinery	Hydro Processing (Rich)		Hydrogen 8 Train	
1881535 3/28/2010 LI	LI - Equipmen/Unit Trip	Level 1	Level 1	TOP INVESTIGATION—FURNACE TRIP—During the start-up slage of the Hydrogen 2B Train (on Mar 28, 2010	Richmond Relinery	Hydro Processing (Rich)	South Isomax (Rich)	Hydrogen B Train	
1781108 1/6/2010 LI	U - First Aid	Level 1	Level 1	8 Train First Aid to Elbow, EE struck right elbow on permanent ladder structure (stool bracket suppo	Richmond Relinery	Hydro Processing (Rich)		Hydrogen 8 Train	
1775161 12/29/2009 LI	LI - Equipment Failure	Level 3a	Level 3a	Operations contacted inspection group for help finding a vacuum air teak on F-355C skin. After visus	Richmond Relinery Richmond Relinery	Hydro Processing (Rich)		Hydrogen B Train	
1782541 1/9/2010 LI 1844644 3/2/2010 LI	LI - Equipment Failure LI - Plant Run Out/Slow Down	Level 1	Level 1 Level 1	At 3A.M. Friday night shift the AO2 operator notified the H.O. that P382 outboard pump seal was leak [Loss: B-Trein tripped causing reduction in rates at several plants in Hydro. Also, some minimat fi	Richmond Relinery	Hydro Processing (Rich) Hydro Processing (Rich)		Hydrogen 8 Train Hydrogen 8 Train	
1841644 12/2/2010 LI	U - Equipment/Unit Trip	Level 1	Lovel 1	Loss: B-Train tripped causing reduction in rates at several plants in Hydro. Also, some minimal fil	Richmond Refinery	Hydro Processing (Rich)		Hydrogen 8 Train	
1903662 4/21/2010 LI	LI - Non-Industrial	Level 1	Lavel 1	Operator reported to work. Informed colleague that he was not feeling well and wanted to visit the c	Richmond Refinery	Hydro Processing (Rich)		Old Control House (S.Iso)	
1920807 5/9/2010 NLI	NLI - Lessons Learned	No Level Selected	Lovel 1	White making rounds on Sunday meming 08:00 09May2010, the ops saw that V-150 had a level of about 5	Richmond Rafinery	Hydro Processing (Rich)		Other (S.Iso)	
1874183 3/22/2010 HL!	NLI - Centractor Injury	No Level Selected	Level 1	Contractor was walking along the North Isomax Flare pipeway, carrying a rolled up choker when he ste	Richmond Refinery	Hydro Processing (Rich)		Other (S.(so)	
1988045 7/17/2010 NU 1871883 3/20/2010 U	NLI - Non Compliance LI - Contractor Medical w/o lost time	No Level Selected	Level 1 Level 2	Ouring A molecular seal steam cut of the NISO flare, with steam ring control valves at 10% putput(Tr Employee was cleaning around the weld bay before the work day began. In reaching for a Piece of Pipe	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)		Other (S,iso) Other (S,iso)	
1871883 3/20/2010 U	Li - Contractor Medical w/o lost time	Level 2	Lavei 2	P2S contractor lacerated his upper left thumb knuckle while grinding on a 1" line at the flare V-281	Richmond Refinery	Hydro Processing (Rich)		Other (S.(so)	
3206 1/17/2010 Lt	LI - Product Quality (Int)	Level 2	Lavei 2	On January 17, 2010, at 8AM, propane at the LPG Spheres tested positive for HZS. The SISO C3 Treate	Richmond Relinery	Hydro Processing (Rich)		Other (S.Iso)	
49024 4/1/2010 LI	LI - Non-Industrial	Level 1	Level 1	Contractor complained that a pre exisisting condition was bothering him to his supervisor and chevro	Richmond Relinery	Hydro Processing (Rich)	South Isomax (Rich)	Other (S.iso)	
1845377 3/2/2010 U	LI - Equipment Damage	Level 1	Level 1	A fold up mirror for the Chevron 26 ton DeMag crane suffered damage when it came in contact with the	Richmond Ratinery	Hydro Processing (Rich)	South Isomax (Rich)	Other (S.iso)	
									· ·

					LEVEL1	LEVEL2	LEVEL3	LEVEL4	Enel S	LEVELG
CONTROL DATE OF FORM	LOSS TYPE LI - MVC - Contractor		POTENTIAL LEVEL		Richmond Relinery	Hydro Processing (Rich)	South (somax (Rich)	Other (S.Iso)		
1550585 7/15/2009 LI 1516612 8/17/2009 LI			Level 1	Investigate smoking flare. No fiaring indications were seen (high flare header pressure or flow to t	Richmond Relinery		South Isomax (Rich)	Other (S.Iso)		
1925873 5/14/2010 U			Level 1	At the beginning of dayshift, Operator told STL that he had initation to his eyes that started whill	Richmond Refinery			Other (S.Iso)		
1578684 6/4/2009 U	LI - Contractor First Aid	Levei 1	Level 1		Richmond Relinery			Other (S.Iso)		
1552325 7/15/2009 NLI	NLI - General Liability		Level 1	Tribe called an employed may design to the marriage and the state that the state of	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)		SDA Unit		
72458 2/2/2010 NU			Level 1 Level 1	Calified Ciripleyee into simily tides in the pipe rack of called the papers service ( 111 t sine service	Richmond Refinery	Hydro Processing (Rich)		SDA Unit		
152 11/18/2009 NLI 195 12/15/2009 NLI	NLI - Operational Leak		Level 1		Richmond Refinery	Hydro Processing (Rich)	South Isomax (Rich)	SDA Unit		
358 5/1/2010 LI		Level 1	Level 1	Incident Flaring from SISO with extinguishing of pilots on the flare.	Richmond Refinery	Hydro Processing (Rich)		SDA Unit		
1843855 7/9/2009 LL	LI - Equipment Failure	Level i	Level 1	TOP INVESTIGATION-SDA/C-123 High Level, Loss of Anti-Foam Injection Feed Pulled to 120 Module	Richmond Refinery			SDA Unit		
1623541 9/8/2009 LI	니 - Equipment Failure			int -1204 to 3 addon, interferent interference to a crep interference interference to	Richmond Refinery Richmond Refinery	Hydro Processing (Rich) Hydro Processing (Rich)		SDA Unit		
1623541 9/8/2009 LI	LI - Business Loss		Level 1 Level 1		Richmand Refinery			SDA Unit		
1725210 \$1/19/2009 U 1563500 7/24/2009 U	Li - First Aid Li - Contractor First Aid		Level 1		Richmond Refinery	Hydro Processing (Rich)		SDA Unit		
11664430 10/6/2009 U	LI - Fire/Explosion	Level 1	Level 1		Richmond Refinery			SDA Unit		
1564070 7/25/2009 LI	LI - Equipment Fallure			At 68:45 a Pentane leak was discovered on E-130E Inlet line down stream of the fulet block. Operatio	Richmond Refinery		South Isomax (Rich)	SDA Unit		
1664700 10/6/2009 LI	LI - First Aid		Level 1	1 box 2 date = 2 date	Richmond Refinery Richmond Refinery		South Isomax (Rich) South Isomax (Rich)	SDA Unit SDA Unit		
1940901 5/29/2010 U	LI - Incorrect Volume		Level 1 Level 1	HIGH LIQUID LEVEL IN V-282 (Eleven Hours). F-135 tripped on loss of flow, P-135 pump cavitated causing P-135A to aps on. Both pumps running an	Richmond Refinery			SDA Unit		
1961848 6/25/2010 U 1609474 8/27/2009 U	LI - Equipment/Unit Trip		Level 3a	1-100 thipping oil ions of the state of the	Richmond Refinery		South Isomax (Rich)	SDA Unit		
1509474 5/27/2009 U 1578406 7/7/2009 U	U - Equipment Damage		Level 2	K-300s' splitback cooler E-300 leaked natural gas into the cooling water side, indicating a tube-to-	Richmond Refinery	Hydro Processing (Rich)		SNR Unit		
1900563 3/10/2010 NLI	NLI - Non Compliance		Level 2		Richmond Refinery	Maintenance Facilities (Rich)	Beiler Shop			
2008226 8/19/2010 LI	U - First Aid		Level 1	TOP INVESTIGATION-PIPE SPOOL FELL ON FOOT—On Aug 19, 2010 mechanics had completed welds on an 8" dr		Maintenance Facilities (Rich) Maintenance Facilities (Rich)	Boiler Shop Boiler Shop	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
1725644 11/19/2009 LI	LI - Non-Compliance Company Policy		Level 1	TOP INVESTIGATION-UNAUTHORIZED PERSONNEL USING EQUIPMENT  EE was walking past the door way between the Boiler shop & CTR. This area is usually breezy when the	Richmond Refinery Richmond Refinery		Boiler Shop			<del></del> -
1E97449 4/14/2010 LI	LI - First Aid LI - First Aid	Level 1	Lavel 1 Level 1	EE was warking past the door way between the bolish and a Cirk, Triss and is dodwn show, which our EE was lifting bleeder blinds to a cart after welding piping to them. He had done 6 of them when he	Richmond Refinery		Boller Shop			-
1786597 1/13/2010 U 1779081 12/23/2009 NU	NLI - Non-Compliance Company Policy	4	Level 1	Radiographic film showing a 0,07" remaining thickness steam line connection to a washdown station in	Richmond Refinery		Central Maintenance Building			
1779081 12/23/2009 NLI	NLI - Business Process		Level 1	Radjegraphic film showing a 0,07" remaining thickness steam line connection to a washdown station in	Richmond Refinery		Central Maintenance Building			
1930118 5/19/2010 LI	U - MVC - Company	Level 1	Level 1	Company with thouse goods (In) as the contract of the contract	Richmond Refinery		Central Maintenance Building			
1991433 7/26/2010 NU	NLI - Lessons Leamed	No Level Selected	Level 1		Richmond Refinery Richmond Refinery	Maintenance Facilities (Rich) Maintenance Facilities (Rich)	Central Maintenance Building Central Maintenance Building			
1912432 4/4/2010 U	LI - Notice of Violation LI - Non-Compliance Government	Level 1	Level 2 Level 2	Missing Niton PMI analyzer (sin 13354) having a sealed source containing Americium 241 at 30 milliou Missing Niton PMI analyzer (sin 13354) having a sealed source containing Americium 241 at 30 milliou	Richmond Refinery	Maintenance Facilities (Rich)	Central Maintenance Building			
1912432 4/4/2010 U	Requirement					, , , , , , , , , , , , , , , , , , , ,				
1912432  4/4/2010 Li	니 - Employee Theñ (Merchandise)	Level 1	Level 2		Richmond Relinery	Maintenance Facilities (Rich)	Cantral Maintenance Building			
1912432 4/4/2019 LI	LI - Criminal Activity		Level 2	Missing Nion PMI analyzer (s/n 13354) having a scaled source containing Americum 241 at 30 milliou	Richmond Refinery Richmond Refinery	Maintenance Facilities (Rich) Maintenance Facilities (Rich)	Central Maintenance Building Central Maintenance Building			
1684348 10/14/2009 LI	Lt - Non-Industrial Lt - Contractor First Aid	Level 1	Level 1 Level 1	Employee had been removing Christmas decorations from overhead shelves in his Garage on Sunday, Octo A contractor Jantor was getting off shift and when walking thru parking lot to get to yehicle to is	Richmond Refinery		Central Maintenance Building			
1995836 7/7/2010 LI 1833985 2/10/2010 NLI	NLI - Employee Injury		Level 1	A contractor Januar was getting off shift and when warking thro parking for to get to venicle to re  When schoduled for a manifet training, I was also suppose to get a safety harness from the Central T	Richmond Refinery		Central Tool Room			
1833985 27672010 HC	LI - MVC - Contractor	Level 1		MVC, Contractor vs Contractor, Timec EE while backing out of a parking stall, made contact with a ve	Richmond Refinery	Maintenance Facilities (Rich)	Central Teol Room			
1851384 3/3/2010 LI	LI - MVC - Contractor	Lavel 1	Level 1		Richmond Refinery	Maintenance Facilities (Rich)	Central Tool Room			
1851384 3/3/2010 U	Ui - Contractor First Aid	Level 1	Level 1		Richmond Relinery Richmond Relinery	1	Central Tool Room Central Tool Room			
1929966 5/19/2010 U	U - First Aid	Level 1 Level 1	Level 1 Level 1		Richmond Refinery		Central Tool Room			
1830407 2/18/2010 LI 1981228 7/19/2010 LI	LI - First Aid	Level 1	Level 1	While working at the tool repair bench, the mechanic dropped a hammer, when stepping back to pick up	Richmond Refinery		Central Tool Room			
2018266 8/31/2010 LI	LI - Medical w/o Lost Timo	Level 2	Level 2	A Chevron employee heard high pressure air escaping from the regulator safety valve of a breathing a	Richmond Relinery	Maintenance Facilities (Rich)	Central Tool Room			
1749279 12/7/2009 LJ	LI - First Ald	Level 1	Level 1	Employee reported to supervisor that he developed a small rash on forearm. Employee was sent to cli	Richmond Refinery		Electrical Shop			
1817529 2/4/2010 LI	LI - Contractor First Ald	Level 1	Level 1	Employee was walking to exit gate 91 at the end of the workday, when he stepped in a hote and fell.	Richmond Refinery		Gate 91 - Contractor Facilities			
1679220 10/19/2009 NLI	NLI - Equipment Damage	No Level Selected	Level 1	While working In the carpenter cabinet shop a carpenter was operating a hand held electric jigsaw. T Sometime between 0830 and 0930 the SawStop table saw brake was activated. The GMG supervisor was not	Richmond Refinery Richmond Refinery		GMG Facility GMG Facility			
1758210 12/14/2009 U 1793073 1/20/2010 U	Lt - Equipment Damage	Level 1	Level 1		Richmond Refinery		GMG Facility			
1793073 1/20/2010 LI 1946759 6/7/2010 LI	LI - First Aid		Level 1		Richmond Refinery		GMG Facility			
'57391 9/30/2009 LI	LI - Contractor First Aid	Level t	Level 1	EE was finished with funch break and felt a burning sensation. Went to the paint shop eye wash stati	Richmond Refinery		GMG Facility			
7350 4/14/2010 LI	U - Non-Industrial	Level 1	Level 1	BRAND EMPLOYEE COMPLAINED OF A MILD SWELLING AND TIGHTNESS IN BOTH HANDS AFTER HANDLING			GMG Facility			
1946 8/17/2009 L1	U - Criminal Activity	Level 1	Lovel 1	Brand Safety rep reported a color printer missing from thier office sometime between 2:30pm 8/14/09	Richmond Refinery Richmond Refinery		GMG Facility I&E Shop			
23139 1/20/2010 LI	U - First Aid U - Non-Compliance Government	Level 1	Level 2 Level 1	Door struck EE right ankle. EE was entering the I&E shop, EE opened door and let go of door knob to On May 18 we discover the caligases we where using to calibrate the Fuel Drums V-475 and V-701 H2S a	Richmond Refinery		I&E Shop			
1929591 5/18/2010 LI	Requirement	FEAS: 1	L'EASI I	Cut way to we discover the Cre bases we where going to estimate the process a -10 miles -10 to record		(12)				
1817919 2/8/2010 U	Li - First Ald	Levei 1	Level 1	Electrician was sent to remove a tag on the control station for the overhead crane. The tag was loc	Richmond Refinery		I&E Shop			
1912949 4/29/2010 LL	Li - First Ald	Layel 1	Level 2	A Instrumentation Mechanic was performing a test of a Natural Gas Regulator in the Instrumentation	Richmond Refinery		1&E Shop			
2017036 8/30/2010 U	LI - First Aid	Level 1	Level 1	A electrician was inspecting a transformer skid in the electric shop, during the inspecting he opens  Non Industrial -Informational, on the morning of July 16 2009, a Chevron employee called in to repor	Richmond Refinery		I&E Shop I&E Shop			·
1607150 7/16/2009 LI 1891291 3/15/2010 NLI	NEI - Paperwork Incorrect/Not Sent	No Level Selected	Level 1	Chevron se's payroll entered into SAP incorrectly and/or late resulting in inaccurate pay checks.	Richmond Retinery	Maintenance Facilities (Rich)	IMPACT Building			
2019076 8/31/2010 LI	U - Non-Industrial	Level 1	Level 1		Richmond Refinery	Maintenance Facilities (Rich)	IMPACT Building			
1943693 6/2/2010 NU	Nill - Contractor Injury	No Level Selected	Level 1		Richmond Refinery	Maintenance Facilities (Rich)	Machine Shop			
1943693 6/2/2010 NU	NU - Non-Compliance Company Policy	No Level Selected	Level 1	BRAND CARPENTERS ARE REPAIRING THE FLOOR IN THE MACHINE SHOP, THEY WERE AUDITED BY A	Richmond Refinery Richmond Refinery	Maintenance Facilities (Rich) Maintenance Facilities (Rich)	Machine Shop Machine Shop			
1868686 3/17/2010 U	LI - MVC - Company	Level 1	Level 1	The state of the s	Richmond Refinery	Maintenance Facilities (Rich)	Machine Shoo			
2022170 9/7/2010 NLI 2013057 8/25/2010 NLI	NLI - Equipment Damage NLI - Equipment Damage	No Level Sciented No Level Sciented	Level 1	While ganding a shaft on the shaft gander, the wheel staned to vibrate on the return of the out p Installation of P-466A delayed due to piston being damaged while machining.	Richmond Refinery	Maintenance Facilities (Rich)	Machine Shop			
2013057 8/25/2010 NLJ	NLI - Business Interruption	No Level Selected	Lovel 1	Installation of P-466A delayed due to piston being damaged while machining.	Richmond Refinery	Maintenance Facilities (Rich)	Machine Shop			,
1724547 11/18/2009 LI	U - MVC - Personal Use	Leval 1	Leval 1	Chevron EE driving to work hit some black Ice and lost control of company passenger vehicle. Vehicle	Richmond Refinery	Maintenance Facilities (Rich)	Machine Shop			
2938228 9/27/2010 LI	LI - Fire/Explosion	Level 1	Level 1	,	Richmond Refinery	Maintenance Facilities (Rich)	Machine Shop Machine Shop			
1815109 2/4/2010 LI	Li - First Aid Li - First Aid	Level 1	Level 1	At approximately 3:30 pm today a machinist was drilling a bleeder blind on the horizontal boring mac  White turning a piece of material on lathe #17 in the machine shop a ball of moral chips struck out	Richmond Refinery		Machine Shop Machine Shop			
1553779 7/17/2009 LI 1790740 1/18/2010 LI	U - First Aid	Level 1	Level 1	While removeling piston rad from centers, the EE was supporting the rad with his right hand. When the	Richmond Refinery		Machine Shop			
1973770 7/6/2010 LI	U - First Ald	Level 1	Lavel 1	While EE was working on a VOC leak on the E-1434 PRD he went to his tool box to get a tool and while	Richmond Refinery	Maintenance Facilities (Rich)	North Yard Maintenance			
1862653 3/12/2010 LI	LI - Equipment Damage	Level 1	Luvei 1	This incident occurred in front of the P2S weld bay at the #1 parking lot used for the North Isomax Sh	Richmond Refinery		North Yard Maintenance			
185656G 3/16/2010 LI	Li - Non-Industrial	Level 1	Level 1	While EE was driving a pick truck on Pole street near the Poly Plant going to the Alky Plant he felt	Richmond Retinery Richmond Retinery	Maintenance Facilities (Rich) Maintenance Facilities (Rich)	North Yard Maintenance North Yard Maintenance			
1927440 2/16/2010 U 1889676 3/23/2010 U	LI - First Aid LI - Security Incident	Level 1	Level 2 Level 1	Record keeping purpose only, no injury at this time - Hearing shift.  Two contract employees were searched because of a third party report of deadly weapon posession. Th	Richmond Relinery	Maintenance Facilities (Rich)	North Yard Maintenance			
1839676 3/23/2010 U 1834187 2/18/2010 U	LI - Security Incident  LI - MVC - Contractor	Level 1	Level 2	Contract employees drove to Chevron north yard parking lot to pick up another employee. After pickin	Richmond Refinery		North Yard Maintenance			
2028537 9/15/2010 LI	LI - Non-Industrial	Level 1	Level 1	Employee was volunteering at the Bay Area Rescue Mission as part of the Chevron Week of Caring team	Richmond Refinery	Maintenance Facilities (Rich)	Other (M&R)			
1947601 5/12/2010 U	LI - Business Process	Lavel 1	Level 1	In early May 2010 Pass Control started a ticket (SR2010851631) with BRES IT Support reporting proble	Richmond Refinery		Other (M&R)			
1861311 3/11/2010 LI	LI - Equipment Damage	Lovel 1	Level 1	E 333C rolled off of rollers at Hydroblast Pad. Bundle had been placed on the rollers at the end of	Richmond Refinery		Other (M&R)			
1854256 2/24/2010 LI	LI - First Aid	Level 1	Level 1	Record keeping purpose only, no injury at this time - Hearing shift.  Record keeping purpose only, no injury at this time - Hearing shift.	Richmond Refinery Richmond Refinery		Other (M&R) Other (M&R)			
1744874 51/17/2009 LI 1925206 5/9/2010 LI	Li - First Aid Li - Abnormal Supply Occurrence	Level 1	Level 2 Level 3a		Richmond Refinery		Other (M&R)			
1856547 3/3/2010 LI	Li - Equipment Damage	Level 1	Level 1	TOP INVESTIGATION-EXCHANGER PARTS WERE SENT TO RECLAMATION-On March 3, 2010, parts (bundle,			Other (M&R)			
1942811 5/25/2010 LI	LI - Non-Industrial	Level 1	Level 1	Record keeping purpose only, no injury at this time - Hearing shift	Richmond Refinery	Maintenance Facilities (Rich)	Other (M&R)			
1989415 8/21/2010 LI	LI - Non-Industrial	Level 1	Level 1	Record keeping purpose only, no injury at this time - Hearing shift	Richmond Refinery	Maintenance Facilities (Rich)	Planning & Scheduling Facility			
1999872 8/6/2010 LI	Lt - Business Interruption	Level 1	Level 1	On 846 the Weekend Maintenance Crew was scheduled to Install P-455A. The Mechanics found that the g	Richmond Relinery Richmond Relinery		Planning & Scheduling Facility RMC			
1648241 9/27/2009 LI	Li - First Aid Li - General Liability	Level 1	Level 2	While doing the hot alignment on TP-713A in TKC-7 at North Isomax. The mechanic reached out to light  After unlanding three new air conditioner units off of the truck, the forklift operator was attempt	Richmond Retinery Richmond Retinery		RTO		-	
1763910 12/17/2009 LI 1549300 3/1/2010 LI	LI - MVC - Contractor	Level 1	Level 1	AT APPROXIMATELY 7:10 AM ON MONDAY, MAR. 1, A FIRST STUDENT CONTRACT DRIVER HAD A MINOR	Richmond Refinery		RTD			
1731729 11/24/2009 LI	LI-First Aid	Level 1	Level 1	RTD Driver was throwing tie-down strap over lead on truck and felt a small pain in his elbow. Report	Richmond Refinery		RYD			
1633614 9/16/2009 LI	LI - First Ald	Level 1	Level 1	Crane Operator was looking up trying to inspect crane for assembly. Stumbled and fell over a piece o	Richmond Refinery		RTD			
1594876 8/17/2009 LI	LI - Non-Compliance Company Policy	Level 1	Level 1	RTD RE was observed by the refinery manager using a cell phone while driving.	Richmond Refinery		RTD			
1740888 11/29/2009 LI	LI - Operational Leak	Level 1	Level 1	The fuel truck driver was making his rounds filling equipment near the north Isomax cooling water to	Richmand Refinery Richmand Refinery		RTD RTD			
1588185 E/11/2009 L1 1847551 3/2/2010 NU	LI - Equipment Damage	Level 1  No Level Selected	Level 1	At approximately 0100 11 Aug 00 a PPS employee (Wharf Security Driver) was pumping gas at RTD pump  Geing to locker in maming, sapped on wet floor, and fell, EE cleaned up water, and fell note for j	Richmond Relinery		South Yard Maintenance			
1847551 3/2/2010 NU 06386 11/5/2009 LI	NLI - Employee Injury LI - MVC - Company	Level 1	Level 1	While backing out of parking space bumper made contact with another vehicle.	Richmond Refinery		South Yard Maintenance			
34778 \$1/4/2009 LI	LI - First Aid	Lovel 1	Level 1	EE was lifting a 10th tool bag from the back of his work truck and feit a sharp pain in his shoulder	Richmond Refinery	Maintenance Facilities (Rich)	South Yard Maintenance			
18333 9/2/2009 LI	LI - First Ald	Level 1	Level 1	Mechanic was installing a two seal valve @ #7 Pump Station when he inadvertently set his right fore	Richmond Refinery	Maintenance Facilities (Rich)	South Yard Maintenance			
1919135 5/5/2010 LI	니 - Equipment Failure	Level 1	Level 1	Release latch on seather, in a company van failed to release. The belt was cut to release occupant	Richmond Refinery		Orill Grounds			
1731702 11/24/2009 U	U - Non-Industrial	Level 1	Level 1	A P2S employee was in the connex lunch room eating lunch when he apparently had a seizure. The two o	Richmand Refinery	Plant Protection	Drill Grounds	L	<u> </u>	

	** * * *: ****************************	14-11-12 PM	ALE TYPE Site and increasing the interest of the property and the contract of	BETTINGS & CHICK THE SECOND	TO A COLD THE RESIDENCE OF	VAIDENT DOCUMENT	LEVEL1	LEVEL2	I FUELS SEED SEED SEED	I FUELA: STACE OF THE STACE OF	LEVELS	
CONTROL			LOSS TYPE NU - Susiness Process	AGTUAL LEVEL No Level Salected	Lavel 1	NGIDENT DESURPTION  An emergency occurred in an operating plant requiring emergency reaponse. At approximately 15:45 hr	Richmond Refinery	Plant Protection	Firehouse	LEVELA	COVELS	81280
			NU - Business Process	No Level Selected		Chevron Fire Department employed the external refinery alert system to summon volunteer firefighters	Richmond Refinery	Plant Protection	Firehouse			
			LI - MVC - Company	Level 1		While employees were deaning a tame industrial garage concrete floor, a small golf cart-type vehic	Richmond Refinery	Plant Protection	Firehouse			
		NLI I	NU - General Liability	No Level Selected	Level 1	The crew computer work stations desk set up has a pinch point concern between the highliow desk and	Richmond Refinery	Plant Protection	Firehouse			
	2/2/2010	u l	LI - Equipment Failure	Level 1		Monitor on emergency vehicle positioning gears are stripped, causing the monitor not to seat when ch	Richmond Refinery	Plant Protection	Firehouse			
	8/7/2010		LI - Equipment Damage	Level 1		Shore power cord damaged; CanDriver was in the process of pulling the got card out of the engine b	Richmond Refinery	Plant Protection	Firehouse			
	2/20/2010		LI - EquipmenVUnit Trip	Level 1		Ouring a scheduled line feeder switch the firehouse lost power (NL) 1832210). The firehouse general	Richmond Refinery	Plant Protection	Firehouse			
	3/17/2010		LI - Business Interruption	Level 1	Levei :	GFCI main breaker for the Firehouse opened when a breaker for an air conditioner condenser was close	Richmond Refinery	Plant Protection Plant Protection	Firehouse			
			LI - Equipment Damago LI - Equipment Fakure	Level 1		The rear step on IA-608 is damaged and gives away when stepped on, t could result in a personal inj  All data on both Dulktel machines in dispatch were crased by an unknown method.	Richmond Refinery Richmond Refinery	Plant Protection	Firehouse Firehouse			· · · · · · · · · · · · · · · · · · ·
	3/30/2010 9/21/2010	1	Li - Non-industrial	Level 1 Level 1	Level 1	EE with medical issue trans to Kalser via AMR for follow up.	Richmond Refinery	Plant Protection	Firehouse			
	2/20/2010	11 1	LI - Business Interruption	Lovei 1		Loss of electrical power to the Frehouse	Richmond Relinery	Plant Protection	Firehouse			
	2/17/2010		Li - Non-Industrial	Level 1		Chevron employee medical illness, None work related	Richmand Relinery	Plant Protection	Firehouse			
	4/18/2010	<del>l</del> ū l	LI - Non-Compilance Company Policy	Level 1		While responding to the report of a car coming into the Rod & Gun area through 34 gate without slopp	Richmand Refinery	Plant Protection	Firehouse	* "	-	
	8/8/2009	u i	LI - Equipment Failure	Level 1	Lavel 1	Personnel was sprayed with raw sewage. Due to the safety sensitive nature of this failure lenet #3	Richmond Relinery	Plant Protection	Firehouse			
2033321 8	9/22/2010	LI I	LI - First Ald	Level 1	Level 1	EE jumped when field mouse ran over their foot. EE had pain in lower back	Richmond Refinery	Plant Protection	Firehouse			
1675304 1	10/13/2009	NLI .	NLI - MVC - Contractor	No Level Selected		Railserve was shoving cars through crossing at Main and Petrolite. Railserve safety truck was blo	Richmansi Refinery	Plant Protection	Other			
	8/16/2010	LI LI	LI - Equipment Damage	Level 1	Level 1	Person(s) unknown cut perkrieter fence to access refinery and contractor laydown yards. These person	Richmond Refinery	Plant Protection	Other			
	8/18/2010	Li .	U - Cdminal Activity	Level 1		Person(s) unknown cut perimeter fence to access refinery and contractor laydown yards. These person	Richmond Relinery Richmond Relinery	Plant Protection	Other			
	3/29/2010	<u> </u>	LI - Business Interruption LI - Contractor First Ald	Level 1 Level 1			Richmond Refinery	Plant Protection	Other			
	6/17/2010 3/30/2010	11	LI - MVC - Contrador	Level 1	Level 1 Level 1		Richmond Refinery	Plant Protection	Other			
	7/19/2009	ū l	Li - Flort Aid	Level 1		Record keeping purpose only - hearing shift	Richmond Refinery	Plant Protection	Other			
	1/30/2010	Ū l	LL - MVC - Contractor	Level 1		Security vehicle was entering 560 west on Castro Street when it came in contact with another vehicle	Richmond Refinery	Plant Protection	Other	,		
	4/22/2010	u	Li - Non-industrial	Level 1	Level 1	While conducting interior structure fire lighting training at an off site location a fire brigade me	Richmond Relinery	Plant Protection	Other			
	3/27/2010		U - Non-Industrial	Level 1		EE notified me of non work related issue. EE stated he had been seen by emergency room doctor and wi	Richmand Refinery	Plant Protection	Other			
1858577 3	3/17/2010		Li - Medical wio Lost Time	Level 2		Worker was working on elevated scattoiding near C-730 in Noreth Isomex. When he approached a permit	Richmond Refinery	Plant Protection	Other			
	3/3/2010		LI - First Aid	Level i	Level 1	Tom tendons result of live fire extinguisher training at Texas A&M. EE assigned to place in service	Richmond Refinery	Plant Protection	Other			
	10/20/2009		LI - Quality Management System LI - Product Quality (Int)	Level 2	Level 2	A Certificate of Analysis was issued for TANK 991 2009_05145 SPCAE-CA2 on 19/Oct/2009. The volume % A Certificate of Analysis was issued for TANK 991 2009_05145 SPCAE-CA2 on 19/Oct/2009. The volume %	Richmand Refinery Richmand Refinery	Quality Centrol (QCO) (Rich) Quality Centrol (QCO) (Rich)	Analytical Lab Analytical Lab			
	10/20/2009		Li - Product Quality (Int) Nul - Business Interruption	Level 2 No Level Selected		A Certificate of Analysis was issued for TANK 991 2009, 05145 SPCAE-CAZ on 19/00/2009. The Volume %  Demurrana cost was incurred at the RIC RLW because the Barge Drakes Bay was delayed from discharging	Richmond Refinery	Quality Control (QCO) (Rich)	Analytical Lab			
			NU - Late Shipment	No Level Selected	Level 1	Demorrage cost was incurred withe RIC RI, With Decause the Barge Drakes Bay was delayed from discharging	Richmond Refinery	Quality Control (QCQ) (Rich)	Analytical Lab			
			NU - Lessons Learned	No Level Solected	Level 2	TOP INVESTIGATION-CARB (California Air Resources Board) audit results performed on 10 May 2010, had	Richmond Refinery	Quality Control (QCD) (Rich)	Analytical Lab			
			NLI - Product Quality (int)	No Level Selected	Level 2	The LNF completed an 8 day 220ft block into T-3165 on 8/28/10 night-shift. The tank was finaled for	Richmond Refinery	Quality Control (QCD) (Rich)	Analytical Lab			
	2/5/2010	Ų	LI - Non-Compliance Company Policy	Level 1	Lovel 1	inaccurate text information for a flare event on 02/06/2010 was recorded by QCD QCO on the StarLims	Richmond Relinery	Quality Control (QCD) (Rich)	Analytical Lab			
1779376 1	11/13/2009		Li - Nelice of Violation	Level 2		QCD Contilicate of Analysis submitted for SUBCAE-D4 2009_05170 and SUBCAE-D4 2009_05171 had reported	Richmand Refinery	Quality Control (QCO) (Rich)	Analytical Lab			
	4/1/2010		NLI - Paperwork Incorrect/Not Sent	No Level Selected		Environmental report from a subcontract lab had a paperwork error. The report included analytes not	Richmond Refinery	Quality Comrei (QCD) (Rich)	CEL Lab			
	4/6/2010		LI - NOV - Price Scanning	Level 1	Lavel 1	Employee states that he bent down to open the bottom craw of a cabinet, when he felt a sharp pain in	Richmond Refinery	Ouslity Control (CCD) (Rich)	Other (QCD)			
	4/5/2010		LI - First Ald LI - First Ald	Lovel 1	Lavel 1	Employee states that he bent down to open the bottom draw of a cabinet, when he fet, a sharp pain in Blending and Shipping Area Operator splashed motor gaseline into his eye while drawing a golden fuel	Richmond Refinery Richmond Refinery	Quality Control (QCD) (Rich) Quality Control (QCD) (Rich)	Other (QCD)			
	3/11/2010		LI - Spill	Lavel 1	Lavel 1	stending and Shipping Area Operator spisshed materigascine into its eye wate arewing a golden luter  5 gallens of Gissoline products and by-products spiked onto the ground from a 55 gallon drum used as	Richmond Refinery	Quality Control (QCD) (Rich)	Other (QCD)			
	7/0/2010 1/15/2010		Nil - Business Process	Ho Level Selected	Level 1	Operator was moving a guard sample of Diesel from one counter to another in room \$107. Physical lab,	Richmond Refinery	Quality Control (QCD) (Rich)	Physical Lab			
	5/11/2010		LI - Non-Industrial	Level 1		At the start of dayshift, Operator reported and was observed to have discomfort in left leg and was	Richmond Refinery	Quality Control (QCD) (Rich)	Physical Lab			
			NLI - Ar	No Level Sciented	Level 1	While preparing to rack out K-10, mechanic madvenently pushed the stop button for K-9 which shuddo	Richmond Refinery	Utilities & Environmental (Rich)	Environmental (Rich)	BioReactor		
	5/14/2010	u	Li - Non-Compliance Government	Level 1	Layel 1	On May 14th 2010, HES notified the Efficient OVA that the recording chart for the DWOP water temperat	Richmond Refinery	Ltilities & Environmental (Rich)	Environmental (Rich)	Deep Water Outfall		
			Requirement			·						
	8/17/2010	<u>u</u>	LI - Business Process	Level 1	Level 1	The GAC filter vessels are located just upstream of the wastewater effluent to the bay. These carbo	Richmond Refinery	Utilities & Environmental (Rich)	Environmental (Rich)	Doep Water Cutfell		
	8/3/2010		U - Equipment Damage	Level 1	Level 1	The driver is heating re-useable soil at #1 Ox-Pond using and dump truck when the trailer tipped ove	Richmond Refinery Richmond Refinery	Utilities & Environmental (Rich) Utilities & Environmental (Rich)	Environmental (Rich) Environmental (Rich)	Land Farms Other (Environmental)		
	8/24/2010 11/10/2009	<u> </u>	LI - Operational Leak LI - Community Inquiry	Level 1 Level 2	Level 1	Contractors working near abandoned off-loading facility reported oit leaking from a line. Upon arri  At approximately 15:00 hrs on 11/10/09, the Refinery received a call from the local Air District ins	Richmond Refinery	Litities & Environmental (Rich)	Environmental (Rich)	Other (Environmental)		
	12/12/2009	11	LI- NOV - Water	Lavel 1	Lavel 1	On Saturday 12/12/09 storm water samples were taken from the Reclamation area as required by the NPD	Richmond Refinery	Littles & Environmental (Rich)	Environmental (Rich)	Ponda		
	2/16/2010	ū	U-NOV-WER	Lovel 2	Lavel 2	Non-compliance with NPDES Permit for bypassing (about 400 bbls of hydro-test water) of the efficient	Richmond Refinery	Utilities & Environmental (Rich)	Environmental (Rich)	Pends		
	7/8/2009	ū	LI - Business Interruption	Level 1		At approximately 15:00 hrs, a sanitary sewage odor was reported in and around the Admin building cau	Richmond Refinery	Litities & Environmental (Rich)	Environmental (Rich)	Sanitary Sewer System		
1540938 7	7/7/2009	NLI	NLI - Spill	No Level Selected		TOP INVESTIGATION-Spill from Vacuum Truck	Richand Refinery	URRIES & Environmental (Rich)	Environmental (Rich)	Separators		
	7/8/2010	77	NU - Lessons Leamed	No Level Solected	Lavei 1		Richerond Refinery	Lititles & Environmental (Rich)	Environmental (Rich)	Separatora		
	5/11/2010		Li - Contractor First Ald									
		LL.		Lavel 1	Lavel 1	TOP INVESTIGATION-Contractor electrician reported to work with concern of a very sore back on Wedne	Richmond Refinery	Utilities & Environmental (Rich)	Environmental (Rich)	Separators		
	3/16/2010	Li	LI- NOV - Air	Lavel 1	Lavel 1	On 3/16/10, P-202 lift pump at #2 separator falled a VOC inspection. The VOC result was above the 50	Richmond Refinery	Litities & Environmental (Rich)	Environmental (Rich)	Separators		
	8/26/2009	Li	LI - NOV - AIr LI - Fire/Explosion	Level 1 Level 1	Level 1 Level 1	On 3/16/10, P-202 8ft pump at #2 separator failed a VOC Inspection. The VOC result was above the 50 Portable dieset engine driven pumps are used as part of No. 13 separator 8/D. One of these pumps was	Richmond Refinery Richmond Refinery	Utilities & Environmental (Rich) Utilities & Environmental (Rich)	Environmental (Rich) Environmental (Rich)	Separators Separators		
2034310 (1	8/26/2009 9/1/2010	Li Li	LI - NOV - Air LI - Fire/Explosion LI - Community Inquity	Level 1 Level 1 Level 1	Level 1 Level 1 Level 1	On 318710, P-202 fit pump at 42 separator failed a VOC Inspection. The VOC result was above the 50 Penaele dieset engine diven pumps are used as part of No. 13 separator 50. One of these pumps was internal orders in the seath end of the Refinery were detected sround 5:00 ant. At the time of the odo	Richmond Refinery Richmond Refinery Richmond Refinery	Luitties & Environmental (Rich) Utitities & Environmental (Rich) (Utitities & Environmental (Rich)	Environmental (Rich) Environmental (Rich) Environmental (Rich)	Separators Separators Separators		
1959422	8/25/2009 9/1/2010 9/22/2010	Li Li Li	LI - NOV - Air LI - Fire/Explosion LI - Community inquity LI - First Aid	Level 1 Level 1 Level 1 Level 1	Level 1 Level 1	On 3/16/10, P-202 8ft pump at 42 separator failed a VOC Inspection. The VOC result was above the 50 Portable dieset engine driven pumps are used as part of No. 13 separator 8/D. One of these pumps was	Richmond Refinery Richmond Refinery	Utilities & Environmental (Rich) Utilities & Environmental (Rich)	Environmental (Rich) Environmental (Rich)	Separators Separators		
	8/25/2009 9/1/2010 9/22/2010 6/22/2010		LI - NOV - Air LI - Fire/Explosion LI - Community Inquity	Level 1 Level 1 Level 1	Lavel 1 Lavel 1 Lavel 1 Lavel 1	On 3/16/10, P-202 th pump at #2 separator failed a VOC inspection. The VOC result was above the 50 Portable dissellenging driven pumps are used as part of No. 13 separator 5/D. One of these pumps was literated odors in the seath end of the Refinery were detected around 9:00 art. At the time of the odo Shartly after completing an inapection of #2 Separator the employee felt initiation in his right by ye.	Richmond Refinery Richmond Refinery Richmond Refinery Richmond Refinery	Usikies & Environmental (Rich) Usikies & Environmental (Rich) (Usikies & Environmental (Rich) (Usikies & Environmental (Rich)	Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich)	Separators Separators Separators Separators		
1595467 E	8/25/2009 9/1/2010 9/22/2010	NU NU NU NU NU	LI - NOV - AIr U - Fire/Explosion LI - Germunity Inquiry LI - First Aid NLI - Employee Injury	Level 1 Level 1 Level 1 Level 1 No Level Selected	Level 1 Level 1 Level 1 Level 1 Level 1 Level 2	On 3/16/10, P-202 lift pump at 42 separator tailed a VOC Inspection. The VOC result was above the 50 Portable dissellenging driven pumps are used as part of No. 13 separator 5/D. One of these pumps was internal odors in the seuth end of the Refinery were detected around 9:00 am. At the time of the odo Shortly after completing an inspection of 42 Separator the employee left initiation in his right eye.  While using a hammer to the a stud out of a 16° flange the left index finget got caught between the	Richmond Refinery	Usikies & Environmental (Rich)	Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Unities (Rich) Unities (Rich) Unities (Rich)	Separators Separators Separators Separators Separators Sumps Not Power & Control House N 1 Power & Control House		
1595467 E 1736532 1764334	8/25/2009 9/1/2010 9/22/2010 6/22/2010 8/12/2009 11/27/2009	11 12 12 13 14 14 14 14 14 14 14 14 14 14 14 14 14	LI - NOV - Air LI - Fire Explosion LI - Community Inquiry LI - First Aid NLI - Employee Injury NLI - Employee Injury NLI - Euphoment Damage NLI - Non-Compliance Company Policy	Level 1 Level 1 Level 1 Level 1 Level 1 No Level Selected No Level Selected No Level Selected No Level Selected	Level 1 Level 1 Level 1 Level 1 Level 1 Level 1 Level 2 Level 2 Level 2	On 31/8/10, P-202 fit pump at 42 separator failed a VOC Inspection. The VOC result was above the 50 Potable dieset engine driven pumps are used as part of No. 13 separator 5th, One of these pumps was internal orders in the seath end of the Refinery were detected around 3:00 ant. At the time of the odo Sharity after completing an inspection of \$2.5 separator the employee felt initiation in his right eye. While using a hammer to larp a stud out of a 15° flange the felt finder finery got august between the There have been several resemble condensate burns to plant personnel in the Chevron refining syste. At approximately 10.00 11/27/03 a widow at \$1.00 per Pilot felt to the ground from about 20° of While V-1018 was down and isolated for confined space entry for his pection, modification work for a	Richmond Refinery	Lülkies & Environmental (Rich)	Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Utilities (Rich) Utilities (Rich) Utilities (Rich)	Separators Separators Separators Separators Separators Sumps #I Power & Control House #I Power & Control House #I Power & Control House		
1595467 E 1736532 1 1764334 1 1764334 1	8/26/2009 9/1/2010 9/22/2010 6/22/2010 8/12/2009 11/27/2009 12/16/2009		LI - NOY - Air  LI - Fina/Explosion  LI - Community Inquiry  LI - First Aid  NLI - Employee Injury  NLI - Employee Injury  NLI - Employee Company  NLI - Controctor Injury  NLI - Controctor Injury	Level 1 Level 1 Level 1 Level 1 Level 1 No Level Selected	Level 1 Level 1 Level 1 Level 1 Level 1 Level 1 Level 2 Level 2 Level 2 Level 2 Level 2	On 3/16/10, P-202 lift pump at 82 separator failed a VOC inspection. The VOC result was above the 50 Postable desetlengths driven pumps are used as part of No. 13 separator E/D. One of thisse pumps was internal odors in the south end of the Refinery were detected ground 9:00 ant. At the time of the odo of the south end of the Refinery were detected ground 9:00 ant. At the time of the odo Shortly after completing an inspection of 82. Separator the employee left instation in his right eye.  While using a hammer to larp a stud out of a 167 flange the left index finget got caught between the There have been several recent hot condensate burns to plant personnel in the Chevron refining syste At approximately 13:00 11/27/03 a widow at \$1 Power Plant field to the ground from about 20' do to Mill V-701B was down and isolated for confined space entry for inspection, modification work for a While V-701B was down and isolated for confined space entry for inspection, modification work for a	Richmond Refinery	Usikies & Environmental (Rich)	Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Utilities (Rich) Utilities (Rich) Utilities (Rich) Utilities (Rich) Utilities (Rich)	Separators Separators Separators Separators Separators Sumps 31 Power & Control House		
1595467 [1736332 1764334 1764334 1764334 1919619	8/25/2009 591/2010 9/22/2010 6/22/2010 8/12/2009 11/27/2009 12/15/2009 12/15/2009 5/5/2010		LI - NOV - Air  LI - First Explosion  LI - Community Inquily  LI - First Aid  NLI - Employee Injury  NLI - Employee Injury  NLI - Equipment Damage  NLI - Non-Corpliance Company Policy  NLI - Costractor Injury  NLI - Costractor Injury  NLI - Lessons Leamed	Level 1 Level 1 Level 1 Level 1 Level 1 No Level Selected	Level 1 Level 1 Level 1 Level 1 Level 1 Level 2 Level 2 Level Z Level Z Level 3	On 3/16/10, P-202 lift pump at 82 separator failed a VOC inspection. The VOC result was above the 50 Portable deset engine driven pumps are used as part of No. 13 separator 870. One of these pumps was internal colors in the acoth end of the Refinery were detected enrund 91:00 ant. At the time of the color internal colors in the acoth end of the Refinery were detected enrund 91:00 ant. At the time of the color Shartly after completing an inspection of 82 Separator the employee felt initiation in his right eye.  While using a hammer to rap a sturf out of a 15° flange the felt index flaget got caught between the There have been several recent hot condensate bowns to plant personnells in the Chevron refining syste. At approximately 13:00 11/27/03 a widow at 81° Power Plant felt to the ground from about 20° do to will While V-701B was down and isolated for confined space entry for inspection, modification work for a While V-701B was down and isolated for confined space entry for inspection, modification work for a Four contract employees and their company replices excuring an abstance tip of all 9 Power and were go	Richmond Refinery	Usikies & Environmental (Rich)	Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Utilities (Rich)	Separators Separators Separators Separators Separators Separators Sumps		
1595467   1736532   1764334   1754234   1919619   2003054   1	8/25/2009 91/2010 9/22/2010 6/22/2010 8/12/2009 11/27/2009 12/15/2009 12/15/2009 5/5/2010 8/12/2010		LI - NOV - Air  LI - Fira/Explosion LI - Germanny inquiry LI - First Aid MLI - Employee Injury NLI - Employee Injury NLI - Employee Injury NLI - Employee Injury NLI - Requipment Damage NLI - Non-Compliance Company Policy NLI - Contractor Injury NLI - Lessons Leamed NLI - Lessons Leamed NLI - Lessons Leamed	Level 1 Level 1 Level 1 Level 1 Level 1 M Level Selected No Level Selected	Level 1 Lavel 1 Lavel 1 Lavel 1 Lavel 1 Lavel 2 Lavel 2 Lavel 2 Lavel 2 Level Z Level 3 Lavel 1	On 3/18/10, P-202 fit pump at 82 separator failed a VOC Inspection. The VOC result was above the 50 Portable diesetlengine driven pumps are used as part of No. 13 separator 5D. One of these pumps was internal doors in the aeath end of the Refinery were detected around 9:00 ant. At the time of the odo Shortly after completing an inspection of 82 Separator the employee jett initiation in his right eye. While using a hammer to hap a stud end of a 15° flange the tell index finery of caught between the There have been several recent hot condensate burns to plant personnel in the Chevron refining syste. At approximately 13:00 11/27/03 a widow at at Power Plant felt to the ground from about 20° do to While V-101B was down and isolated for confined space entry for happection, modification work for a While V-701B was down and Isolated for confined space entry for happection, modification work for a While V-701B was down and Isolated for confined space entry for happection, modification work for a Four contract employees and their company representative securing an abstanced job at all Power Plant receives a cell from the	Richmond Refinery	Lütikes & Environmental (Rich)	Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Utilites (Rich)	Separators Separators Separators Separators Separators Sumps \$1 Power & Control House		
1595467   1736532   1764334   1754234   1919619   2003054   1	8/25/2009 591/2010 9/22/2010 6/22/2010 8/12/2009 11/27/2009 12/15/2009 12/15/2009 5/5/2010		LI - NOV - Air  LI - First Explosion  LI - Community Inquily  LI - First Aid  NLI - Employee Injury  NLI - Employee Injury  NLI - Equipment Damage  NLI - Non-Corpliance Company Policy  NLI - Costractor Injury  NLI - Costractor Injury  NLI - Lessons Leamed	Level 1 Level 1 Level 1 Level 1 Level 1 No Level Selected	Level 1 Level 1 Level 1 Level 1 Level 1 Level 2 Level 2 Level Z Level Z Level 3	On 3/16/10, P-202 lift pump at 82 separator failed at VOC inspection. The VOC result was above the 50 Postable dieset engine driven pumps are used as part of No. 13 separator ED. One of these pumps was internal doors in the south end of the Refinery were detected ground 9:00 and. At the time of the dod Shortly after completing an inspection of 82 Separator the employee left instation in his right eye.  While using a harmone to lap a stud out of a 15° flange is a left index finget got caught between the While using a harmone to lap a stud out of a 15° flange is to large personnel in the Chevron refining syste. At approximately 13:00 11/27/03 a widow at 81° Power Plant field to the ground from about 20′ do to wid.  While V-701B was down and isolated for confined space entry for inspection, modification work for a While V-701B was down and isolated for confined space entry for inspection, modification work for a Four centract employees and their company replease recturing an abstances to all 81° Power and were go TOP INVESTIGATION-INVERSE RUPTURED—Approximately 08:30am, 81° Power Plant receives a call from the K-3 Utilities Air compressor shudown while parfarming Low Oil Pressure Azam test.	Richmond Refinery	Lülkies & Environmental (Rich)	Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Unitles (Rich)	Separators		
1595467   1736532   1764534   1764334   1764334   1919619   2003054   1588152   2025152   1	8/25/2009 911/2010 91/22/2010 6/22/2010 8/13/2009 11/27/2009 12/16/2009 12/16/2009 8/12/2010 8/12/2010 8/12/2009 8/12/2009 8/12/2009		LI - NOV - Air  LI - Firar Explosion  LI - Community Inquily  LI - First Aid  NLI - Employee Injury  NLI - Employee Injury  NLI - Equipment Damage  NLI - Non-Corspilance Company Policy  NLI - Costonator Injury  NLI - Costonator Injury  NLI - Lessons Leamed  NLI - Lessons Leamed  LI - Equipment Aunt Trip  LI - Firar Explosion	Level 1 Level 1 Level 1 Level 1 Level 1 M Level Selected No Level Selected	Level 1 Level 1 Level 1 Level 1 Level 1 Level 2 Level 2 Level 2 Level 2 Level 2 Level 2 Level 1	On 3/18/10, P-202 fit pump at 82 separator failed a VOC Inspection. The VOC result was above the 50 Portable diesetlengine driven pumps are used as part of No. 13 separator 5D. One of these pumps was internal doors in the aeath end of the Refinery were detected around 9:00 ant. At the time of the odo Shortly after completing an inspection of 82 Separator the employee jett initiation in his right eye. While using a hammer to hap a stud end of a 15° flange the tell index finery of caught between the There have been several recent hot condensate burns to plant personnel in the Chevron refining syste. At approximately 13:00 11/27/03 a widow at at Power Plant felt to the ground from about 20° do to While V-101B was down and isolated for confined space entry for happection, modification work for a While V-701B was down and Isolated for confined space entry for happection, modification work for a While V-701B was down and Isolated for confined space entry for happection, modification work for a Four contract employees and their company representative securing an abstanced job at all Power Plant receives a cell from the	Richmond Refinery	Lütikes & Environmental (Rich)	Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Utilites (Rich)	Separators Separators Separators Separators Separators Sumps \$1 Power & Control House		
1595467 [173632] 1754334 1754334 1754334 1919619 2003054 1588152 2025152 1959122	8/25/2009 91/2010 9/22/2010 6/22/2010 8/12/2009 11/27/2009 12/15/2009 12/15/2009 5/5/2010 8/12/2010		LI - NOY - Air  LI - Fira/Explosion  LI - Germanniy Inquiry  LI - First Aid  NLI - Employee Injury  NLI - Employee Injury  NLI - Equipment Damage  NLI - Non-Conspilance Company Policy  NLI - Contractor Injury  NLI - Lessons Leamed  NLI - Equipment/Unit Trip	Level 1 Level 1 Level 1 Level 1 No Level Selected Level I Level 1 Level 1	Level 1 Level 1 Level 1 Level 1 Level 1 Level 2 Level 2 Level 2 Level 2 Level 2 Level 2 Level 1	On 3/16/10, P-202 lift pump at 82 separator failed a VOC inspection. The VOC result was above the 50 Portable deset engine driven pumps are used as part of No. 13 separator 870, one of these pumps was internal colors in the acord nead of the Refinery were detected around 93/00 and. At the time of the color internal colors in the acord nead of the Refinery were detected around 93/00 and. At the time of the color Shartly after completing an inspection of 82 Separator the employee jett irritation in his right eye.  While using a harmonic to tap a stud out of a 15° flange the left index flanget got caught between the There have been several recent hat condensate bowns to plant personnel in the Chevron refining syste. At approximately 13:00 11/27/03 a widow at \$1° Power Plant felt to the ground from about 20° do to wid.  While V-701B was down and Isolated for confined space entry for Inspection, modification work for a Moliter V-101B was down and Isolated for confined space entry for Inspection, modification work for a Fow contract employees and their company replaces securing an abstanced job of \$1° Power and were go TOP INVESTIGATION-N2 HOSE RUPTURED—Approximately 08:30am, \$1° Power Plant receives a call from the X-3 Utilities Air compressor shudown while parfarming Low Oil Pressure Alarm test.  X approximately 18:30 the Power Plant Boiler Operator (PPBO) smaded smoke while making rounds. Up	Richmond Refinery	Usikies & Environmental (Rich)	Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Unitles (Rich)	Separators		
1595467   1736332   1764334   1764334   1764334   1764334   179619   3   200395152   175867   1756677   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   17566774   175667	828/2009 91/2010 92/22/2010 62/22/2010 81/2/2009 11/16/2009 12/16/2009 13/16/2009 81/2/2010 81/2/2010 81/2/2010 62/2/2010 11/11/2009 7/2/5/2009		LI - NOV - Air  LI - Fira/Explosion LI - Germanny inquiry LI - Firat Aid MLI - Employee Injury NLI - Employee Injury NLI - Employee Injury NLI - Reployee Injury NLI - Reployee Injury NLI - Contractor Injury NLI - Contractor Injury NLI - Lessons Leamed NLI - Lessons Leamed LI - Equipment/Unit Trip LI - Firat-Explosion LI - Equipment/Unit Trip LI - Firat Aid LI - Equipment Fabure	Level 1 Level 1 Level 1 Level 1 Level 1 M Level 5 No Level Selected Level 1	Level 1 Lavel 1 Lavel 1 Lavel 1 Lavel 1 Lavel 2 Lovel 2 Lovel 2 Lovel 2 Lovel 3 Level 2 Level 1	On 21/8/10, P-202 fit pump at 82 separator failed a VOC Inspection. The VOC result was above the 50 Portable diesetlengine driven pumps are used as part of No. 13 separator Etd. One of these pumps was internal colors in the seath end of the Refinery were detected around 9:00 ant. At the time of the odo Shortly after completing an inspection of 82 Separator the employee left initiation in his right eye. While using a hammer to larp a stud end of a 15° flange the feet index finery of caught between the There have been several recent hot condensate burns to plant personnel in the Chevron refining syste. At approximately 13:00 11/27/03 a widow at at Power Plant feet to the ground from about 20° do to with While V-701B was down and Isalated for confined space entry for Inspection, modification work for a While V-701B was down and Isalated for confined space entry for Inspection, modification work for a While V-701B was down and Isalated for confined space entry for Inspection, modification work for a Four contract employees and their company rap were securing an abstanced job at 81 Power and were go TOP INVESTIGATION-INZ HOSE RUPTURED—Approximately 08:30em, 81 Power Plant receives a call from the K-3 Utilities Air compressor shudown while performing Low Oil Pressure Alam text. As approximately 10:300 for Power Plant Boiler Operator (PSPD) amoids dismole while making rounds. Up At approximately 10:300 for Power Plant Boiler Operator (PSPD) amoids dismole while making rounds.  On Wednesday, 11/11/69, employee performed a Bahir routine of exercise that included some pushups.	Richmond Refinery	Lütikes & Environmental (Rich)	Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Utilities (Rich)	Separators Separators Separators Separators Separators Separators Separators Sumps \$1 Power & Control House		
1535467 17765324 1764334 1764334 1319619 2003054 1588152 2003054 1588152 1359122 1715667 1566174 1821135	9785/2009 971/2010 972/2010 972/2010 972/2010 972/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009		LI - NOV - Air  LI - Fira/Explosion  LI - Generatini Inquiry  LI - Firat Aid  NLI - Employee Injury  NLI - Employee Injury  NLI - Sequipment Damage  NLI - Non-Compilence Company Policy  NLI - Contractor Injury  NLI - Lessons Learned  LI - Equipment/Unit Trip  LI - Firat Aid  LI - Equipment/Unit Trip  LI - First Aid  LI - Equipment/Link  LI - E	Level 1 Level 1 Level 1 Level 1 Level 1 No Level Selected Level Selected Level 1	Level 1 Level 1 Level 1 Level 1 Level 1 Level 2 Level 2 Level 2 Level 2 Level 2 Level 3 Level 1	On 3/16/10, P-202 8ft pump at 82 separator failed a VOC Inspection. The VOC result was above the 50 Portable desetlengths diven pumps are used as part of No. 13 separator E/D. One of these pumps was internal odors in the south end of the Refinery were detected ground 9:00 am. At the time of the odo Shardy after completing an inspection of 82. Separator the employee jett initiation in his right eye.  Whills using a hammer to tap a stud out of a 16° flange the left index finget got caught between the Whills using a hammer to tap a stud out of a 16° flange the left index finget got caught between the There have been several recent hot condensate burns to plant personnel in the Chevron refining syste At approximately 13:00 11/27/03 a widow at \$1\$ Power Plant felt to the ground from about 20° do to M. While V-701B was down and isolated for confined space entry for inspection, modification work for a While V-701B was down and isolated for confined space entry for inspection, modification work for a Pour contract employages and their company replaces securing an abstanced job at \$1\$ Power Pand were go TOP INVESTIGATION-INVESTIGATION AND EXCESTIGATION AND AND REPORT AND	Richmond Refinery	Usikies & Environmental (Rich)	Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Unitles (Rich)	Separators Separators Separators Separators Separators Separators Separators  ### Power & Control House #### Power & Control House ####################################		
1555467   1736332   1764334   1764334   1764334   1764334   1919619   2000054   1588152   12000054   1588152   12000054   1588152   1959122   1715667   1566174   1821135   1621149   1	925/2009 91/2010 92/22/2010 62/2/2010 62/2/2010 81/2/2009 11/2/7/2009 11/2/7/2009 11/2/7/2009 81/2/2010 81/2/2010 81/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010 84/2/2010		LI - NOV - Air  LI - Fire/Explosion LI - Germanny Inquiry LI - Fire Xid MLI - Employee Injury NLI - Employee Injury NLI - Employee Injury NLI - Employee Injury NLI - Romanny NLI - Non-Cooppiance Company Policy NLI - Contractor Injury NLI - Lessons Learned NLI - Lessons Learned NLI - Euglement/Loit Trip LI - Fire/Explosion LI - Equipment/Loit Trip	Level 1 Level 1 Level 1 Level 1 Level 1 No Level Selected Level Selected Level 1 Level 2 Level 2 Level 2 Level 2 Level 2 Level 3 Level 3 Level 3 Level 4 L	Level 1 Level 1 Level 1 Level 1 Level 1 Level 1 Level 2 Level 2 Level 2 Level 2 Level 2 Level 1 Level 2	On 31/8/10, P-202 fit pump at #2 separator failed a VOC Inspection. The VOC result was above the 50 Potaele dieset lengths driven pumps are used as part of No. 13 separator Etd. One of these pumps was internal orders in the seath end of the Refinery were detected around 5:00 ant. At the time of the odd Shortly after completing an inspection of #2. Separator the employee jett intration in his right eye. While using a hammer to larp a stud out of a 15° flange the felt index finery got actual between the There have been several resembler condensate burns to plant personnel in the Chevron refining syste. At approximately 13:00 11/27/03 a vidow at #1 Power Plant felt to the ground from about 20° do to M While V-701B was down and isolated for confined space entry for inspection, modification work for a While V-701B was down and isolated for confined space entry for inspection, modification work for a Four contract employees and their company rep were sequency as a batternet job at #1 Power Plant were go TOP INVESTIGATION-N2 HOSE RUPTURED—Approximately 08:30am, #1 Power Plant receives a cell from the K-3 Utilities Air compressor shudown while perfaming Low Oil Pressure Alarm test. At approximately 10:30 the Power Plant Beilar Operator (PSPO) amedia cancel with emaking rounds. Up At approximately 10:30 the Power Plant Beilar Operator (PSPO) amedia cancel with no imp.  At approximately 10:00 cm #7 Botter tripped of fine. Bater was immediately re-stand with no imp.  On Wednesday, 11/11/109, employee performed a light returns of exercise that included some pushups.  #1 Boiler Mock valve to 800ff hader has a lasking bonnet.  During normal Power Plant operation, it was requested to start up additional boders due to the inco	Richmond Refinery	Usikies & Environmental (Rich)	Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Utilities (Rich)	Separators		
1595467   1765574   1765674   1765674   1764334   1764334   1764334   1916619   2003054   1588152   1959122   1715667   1566174   1621135   16211492   1824492   1824492   1824492   1824492   1824492   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   1824674   18246	828/2009 91/2010 92/22/2010 62/22/2010 61/22/2009 11/2/72/2009 12/16/2009 12/16/2009 81/2/2010 81/2/2010 81/2/2010 62/2/2010 11/11/2009 7/2/5/2009 21/2/2010 21/2/2010 21/2/2010 21/2/2010 21/2/2010 21/2/2010 21/2/2010 21/2/2010 21/2/2010		LI - NOV - Air  LI - Fire/Explosion LI - Germanny inquiry LI - Firet Aid MLI - Employee injury NLI - Employee injury NLI - Exployee Company Policy NLI - Contractor Injury NLI - Contractor Injury NLI - Lessons Leamed NLI - Lessons Leamed LI - Equipment/Unit Trip LI - Firet Aid LI - Firet Aid LI - Equipment/Unit Trip	Level 1 Level 1 Level 1 Level 1 Level 1 M Level Selected No Level Selected Level 1	Level 1 Lavel 1 Lavel 1 Lavel 1 Lavel 1 Lavel 2 Lavel 2 Level 2 Level 2 Level 2 Level 1 Level 2 Level 2 Level 3 Level 1 Level 2 Level 1	On 2/18/10, P-202 fit pump at 82 separator failed a VOC Inspection. The VOC result was above the 50 Portable diesellengine driven pumps are used as part of No. 13 separator Etd. Once of these pumps was internal odors in the acuth end of the Refinery were detected ground 9:00 ant. At the time of the odo Shortly after completing an inspection of 82 Separator the employee left initiation in his right eye.  While using a hammer to trip a sturi out of a 16° flange the test lindex finget got caught between the There have been several recent hot condensate burns to plant personnell in the Chevron refining systia At approximately 13:00 11/27/03 a widow at \$1\$ Power Plant felt to the ground from about 20° do to While V-1018 was down and isolated for confined space entry for inspection, modification work for a While V-1018 was down and isolated for confined space entry for inspection, modification work for a While V-1018 was down and isolated for confined space entry for inspection, modification work for a While V-1018 was down and isolated for confined space entry for inspection, modification work for a While V-1018 was down and isolated for confined space entry for inspection, modification work for a While V-1018 was down and isolated for confined space entry for inspection, modification work for a Poor Internal Confined Space and the company replaced a space entry for inspection, modification work for a While V-1018 was down and isolated for confined space entry for inspection, modification work for a While V-1018 was down and isolated for confined space entry for inspection, modification work for a While V-1018 was down and isolated for confined space entry for inspection, modification work for a While V-1018 was down and isolated for confined space entry for inspection, modification work for a While V-1018 was down and isolated for confined space entry for inspection, modification work for a While V-1018 was down and isolated for English was down in the While V-1018 was down and isolated for confined space entry for	Richmond Refinery	Usikies & Environmental (Rich)	Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Utilities (Rich)	Separators Separators Separators Separators Separators Separators Separators Sumps \$1 Power & Control House		
1535467 1736332 1754334 1754334 13764334 1379619 2003054 1588152 2025152 1393722 1715667 1566174 1821135 1621149 1824822 18399514	925/2009 91/2010 91/2010 92/2010 62/2010 62/2010 91/27009 11/27009 11/27009 11/27009 11/27009 11/27009 91/2010 91/2010 91/2010 91/2010 91/2010 91/2010 91/2010 91/2010 91/2010 91/2010 91/2010 91/2010 91/2010 91/2010 91/2010 91/2010 91/2010		LI - NOV - Air  LI - Fira/Explosion  LI - Cemenunity Inquiry  LI - Firat Aid  NLI - Employee Injury  NLI - Employee Injury  NLI - Semployee Injury  NLI - Semployee Injury  NLI - Non-Compilence Company Policy  NLI - Contractor Injury  NLI - Lessons Learned  NLI - Equipment/Unit Trip  LI - Fira/Explosion  LI - Equipment/Link Trip  LI - Firat Aid  LI - Equipment Failure	Level 1 Level 1 Level 1 Level 1 No Level Selected Level Selected Level 1	Level 1 Level 1 Level 1 Level 1 Level 1 Level 2 Level 2 Level 2 Level 2 Level 1	On 3/16/10, P-202 lift pump at 82 separator failed in VOC Inspection. The VOC result was above the 50 Portable dieset engine driven pumps are used as part of No. 13 separator E/D. One of these pumps was internal odors in the south end of the Refinery were detected ground 9:00 ant, At the time of the odo on there are not only at 16 per separator E/D. One of these pumps was internal odors in the south end of the Refinery were detected ground 9:00 ant, At the time of the odo on the odo on the odo on the odo of the odo on the odo of the odo on the odo odo on the odo on the odo odo on the odo odo odo odo odo odo odo odo odo od	Richmond Refinery	Usikies & Environmental (Rich)	Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Utilities (Rich)	Separators Separators Separators Separators Separators Separators Separators Separators  ### Power & Control House ### Power & Control House #### Power & Control House #### Power & Control House ####################################		
1595467   1765524   1765524   1764334   1764334   1764334   1764334   199619   3 003054   1588152   1989122   1715667   1566174   1821135   1621149   1824622   1899514   1544667   1544667	828/2009 91/2010 92/22/2010 62/2/2010 81/2/2009 11/2/2009 11/2/2009 11/2/2009 11/2/2009 81/2/2010 81/2/2010 81/2/2010 62/2/2010 62/2/2010 7/2/5/2009 2/10/2010 2/10/2010 2/10/2010 2/10/2010 2/10/2010 2/10/2010 2/10/2010 2/10/2010 2/10/2010 2/10/2010 2/10/2010		LI - NOV - Air  LI - Fire/Explosion LI - Germanny Inquiry LI - Fire Xid MLI - Employee Injury NLI - Employee Injury NLI - Employee Injury NLI - Employee Injury NLI - Contractor Injury NLI - Contractor Injury NLI - Lessons Learned NLI - Lessons Learned LI - Equipment/Unit Trip LI - Fire/Explosion LI - Equipment/Unit Trip LI - Fire/Explosion LI - Equipment/Unit Trip LI - Safety Systems and Relief Devices	Level 1 Level 1 Level 1 Level 1 Level 1 Mo Level Selected No Level Selected Level 1	Level 1 Lavel 1 Lavel 1 Lavel 1 Lavel 1 Lavel 1 Lavel 2 Lovel 2 Lovel 2 Lovel 2 Lovel 1 Level 2 Lovel 1 Level 1	On 31/810, P-202 fit pump at 42 separator failed a VOC Inspection. The VOC result was above the 50 Portable dieset lengths driven pumps are used as part of No. 13 separator Etd. One of these pumps was internal colors in the seath end of the Refinery were detected around 9:00 ant. At the time of the odo Shortly after completing an inspection of 82 Separator the employee left initiation in his right eye. While using a harmory to large and of 15 Separator the employee left initiation in his right eye. While using a harmory to large at such of the 15 flangs the felt index finery of a caught between the There have been several recent hot condensate burns to plant personnel in the Chevron refining syste. At approximately 13:00 11/27/03 a widow at \$1 Power Plant field to the ground from about 20 do to M. While V-701B was down and isolated for confined space entry for inspection, modification work for a While V-701B was down and Isolated for confined space entry for inspection, modification work for a Four centrate employees and their company rep were sequently an abstratemate job at \$1 Power and were go TOP INVESTIGATION-N2 HOSE RUPTURED—Approximately 08:30am, \$1 Power Plant hotely of the Power Plant being the partorning Low Oil Pressure Alami test. As approximately 10:30 the Power Plant being Coperator (PSPD) smalled sinches while making rounds. Up At approximately 10:30 the Power Plant being Coperator (PSPD) smalled sinches while making rounds. Up At approximately 10:30 the Power Plant being Coperator (PSPD) smalled sinches while making rounds. Up At approximately 10:30 the Power Plant Being Coperator (PSPD) smalled sinches while making rounds. Up At approximately 10:30 the Power Plant Being Coperator (PSPD) smalled something being to the incomposition. On Wednesday. 11/11/10:9, emphase be a hakking bonnet.  During normal Power Plant Bolice Trained as Right routine of exercise that included some pushups, 31 Bolice Nock valve to 800% hadden has a hakking bonnet.  During normal Power Plant begins as a hakking bonnet.	Richmond Refinery	Usikies & Environmental (Rich)	Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Utilities (Rich)	Separators Separators Separators Separators Separators Separators Separators Sumps \$1 Power & Control House		
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1595467   1765674   1766713   1766713   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   1764714   176471	925/2009 91/2010 91/2010 92/2010 62/2010 62/2010 91/27009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009	U U U U U U U U U U U U U U U U U U U	LI - NOV - Air  LI - Fira/Explosion  LI - Germannin Inquiry  LI - Firat Aid  NLI - Employee Injury  NLI - Employee Injury  NLI - Employee Injury  NLI - Somplement Damage  NLI - Non- Complement Gompany Policy  NLI - Contractor Injury  NLI - Lessons Learned  NLI - Lessons Learned  LI - Equipment/Unit Trip  LI - Firat Aid  LI - Equipment/Link Trip  LI - Equipment/Link Trip  LI - Equipment Failure  LI - Equipment Failure  LI - Equipment Failure  LI - Safety Systems and Relief Devices  LI - Firat Aid  LI - Equipment/Link Trip	Level 1 Level 1 Level 1 Level 1 Level 1 Level 1 No Level Selected Level 1	Level 1 Level 1 Level 1 Level 1 Level 1 Level 2 Level 2 Level 2 Level 2 Level 2 Level 1	On 3/15/10, P-202 fit pump at 82 separator failed a VOC Inspection. The VOC result was above the 50 Portable dieset engine driven pumps are used as part of No. 13 separator ED. One of these pumps was internal odors in the acoth end of the Refinery were detected ground 9:00 ant. At the time of the odo Shorty after completing an inspection of 82 Separator the employee jett initiation in his right eye.  While using a hammer to tap a stud out of a 167 flange the left index finget got caught between the While using a hammer to tap a stud out of a 167 flange the left index finget got caught between the There have been several recent hot condensate burns to plant personnel in the Chevron refining systia. At approximately 13:00 11/27/03 a widow at \$1 Power Plant field to the ground from about 207 do to Millio V-1018 was down and isolated for confined space entry for inspection, modification work for a While V-1018 was down and isolated for confined space entry for inspection, modification work for a Power contract employees and their company replaces securing an abstancest job at \$1 Power and were go TDP INVESTIGATION-NP LOSE RUPP TURED—Approximately 08:30 am \$1 Power Plant receives a call from the K-3 Utilities Air compressor shuddown while performing Low CII Pressure Alarm test.  At approximately 10:30 the Power Plant Boiles Operator (PPBD) sensited smoke while making rounds. Up As approximately 10:00 am \$7 Boiler inspect of fine. Boiler was immediately no stand with no limp On Wednesday, 1111 109, employee performed a light routine of exercise that included some pushous. \$1 Boiler block valve to 8008 hasder has a leaking bonnet.  On Wednesday, 1111 109, employee bersomed a light routine of exercise that included some pushous. \$1 Boiler block valve to 8008 hasder has a leaking bonnet.  On the following the present plant operation, it was requested to start up additional boilers due to the incr Bonnet pasket leak on main block pressure seal valve on \$4 boiler. This is a pressure sealed bonne On 14 Feb 10 to the refine	Richmond Refinery	Lükkies & Environmental (Rich)	Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Utilities (Rich)	Separators Separators Separators Separators Separators Separators Separators Separators  ### Power & Control House ### Power & Control House #### Power & Control House #### Power & Control House ####################################		
1595467   1765534   1765534   1764334   1764334   1764334   1764334   1764334   1764334   1764334   1764334   17656774   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   1821135   18211	925/2009 91/2010 91/2010 92/2010 62/2010 62/2010 91/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009	U U U U U U U U U U U U U U U U U U U	LI - NOY - Air  LI - Fire/Explosion  LI - Germanny Inquiry  LI - Fire Xid  MLI - Employee Injury  NLI - Employee Injury  NLI - Employee Injury  NLI - Rompione Injury  NLI - Rompione Injury  NLI - Rompione Injury  NLI - Rompione Injury  NLI - Lessons Learned  NLI - Lessons Learned  NLI - Lessons Learned  LI - Equipment/Loit Trip  LI - Fire/Explosion  LI - Equipment/Loit Trip  LI - Fire/Explosion  LI - Equipment/Loit Trip  LI - Safety Systems and Relief Devices  LI - First Aid  LI - Equipment/Loit Trip  LI - Equipment/Loit Trip  LI - Equipment/Loit Trip  LI - First Aid  LI - Equipment/Loit Trip  LI - Plant Run Out/Stow Down	Level 1 Level 1 Level 1 Level 1 Level 1 No Level Selected Level 1	Level 1 Level 1 Level 1 Level 1 Level 1 Level 2 Lovel 1 Level 2 Level 2 Level 2 Level 2 Level 1	On 31/8/10, P-202 fit pump at 82 separator failed a VOC Inspection. The VOC result was above the 50 Potaele dieset engine driven pumps are used as part of No. 13 separator Etd. One of these pumps was internal orders in the seath end of the Refinery were detected around 3:00 ant. At the time of the odd Shortly after completing an inspection of 82 Separator the employee jett initiation in his right eye. While using a hammer to larp a stud out of a 15° flange the felt index finery det caught between the There have been several resemble to endersate burns to plant personnel in the Chevron refining syste. At approximately 13:00 11/27/03 a widdow at 81 Power Plant felt to the ground from about 20° do to M While V-701B was down and isolated for confined space entry for inspection, modification work for a While V-701B was down and isolated for confined space entry for inspection, modification work for a Power central employees and their company rep were sequently as a better employees and their company rep were sequently as a better employee and where go TOP INVESTIGATION-N2 HOSE RUPTURED—Approximately 08:30am, #1 Power Plant better go TOP INVESTIGATION-N2 HOSE RUPTURED—Approximately 08:30am, #1 Power Plant there are also and the sequence of the sequ	Richmond Refinery	Usikies & Environmental (Rich)	Environmental (Rich) Utilities (Rich)	Separators		
1595467   175657   175657   1756574   1756574   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   17566174   1756617	9282009 91/2010 92/202010 92/202010 92/202010 92/202010 92/202010 92/20209 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009		LI - NOV - Air  LI - Fire/Explosion LI - Germanny inquiry LI - Firet Aid MLI - Employee injury NLI - Employee injury NLI - Employee injury NLI - Equipment Damage NLI - Non-Compilance Company Policy NLI - Contractor injury NLI - Contractor injury NLI - Contractor injury NLI - Contractor injury NLI - Equipment/Unit Trip LI - Firet-Explosion LI - Equipment/Unit Trip LI - Equipment/Link Trip LI - Equipment/Link Trip LI - Equipment/Link Trip LI - Equipment/Link Trip LI - Safety Systems and Relief Devices LI - Flat Aid LI - Equipment/Link Trip LI - Product Quadry (int)	Level 1 Level 1 Level 1 Level 1 Level 1 Ma Level Selected No Level Selected Level 1	Level 1 Lavel 1 Lavel 1 Lavel 1 Lavel 1 Lavel 1 Lavel 2 Lavel 1 Lavel 2 Lavel 2 Level 2 Level 2 Level 1 Lavel 1	On 2/18/10, P-202 fit pump at 82 separator failed a VOC Inspection. The VOC result was above the 50 Portable dieset engine driven pumps was interested deset engine driven pumps was interested or on the seath of the Refinery were detected around 9:00 ant. At the time of the odo Shortly after completing an inspection of 82 Separator the employee left initiation in his right eye. While using a hammer to larp a stud out of a 15° flange the tell index finget got caught between the There have been several recent hot condensate burns to plant personnel in the Chevron refining systie. At approximately 13:00 11/27/03 a widow at at Power Plant field to the ground from about 20° do to with While V-701B was down and isolated for confined space entry for inspection, modification work for a While V-701B was down and isolated for confined space entry for inspection, modification work for a Chort contract employees and this company rep were securing an abstanced job at 81 Power Plant receives a coll from the Chevron refining systies. At approximately 10:00 the Power Plant Beller Coperator (PPSD) smelded making that the excellent plant receives a cell from the K-3 Utilities Air compressor shudown while performing Low Oil Pressure Alarm test.  At approximately 10:00 am 87 Boller tripped oil fine, Bafer was immediately re-started with no impound the started of the properties of t	Richmond Refinery	Lütikes & Environmental (Rich)	Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Unitles (Rich)	Separators Separators Separators Separators Separators Separators Separators Sumps \$1 Power & Control House		
1535467 1776532 17764334 17764334 1919619 2003054 1588152 2023152 17989122 1775667 1566774 1823135 1823149 1824122 1829514 1546867 1677037 1677037 1677037 1677037 167613 1687138 1687138	9785/2009 971/2010 971/2010 972/2010 672/2010 672/2010 672/2010 971/2009 971/2009 971/2009 971/2010 971/2009 971/2010 971/2009 971/2010 971/2009 971/2010 971/2009 971/2010 971/2010 971/2010 971/2010 971/2010 971/2010 971/2010 971/2010 971/2010 971/2010 971/2010 971/2010 971/2010 971/2009 971/2009 971/2009 971/2009 971/2009 971/2009 971/2009 971/2009 971/2009		LI - NOV - Air  LI - Fira/Explosion LI - Germanniy Inquiry LI - Firat Aid NLI - Employee Injury NLI - Employee Injury NLI - Employee Injury NLI - Somplement Damage NLI - Non- Complement Gompany Policy NLI - Contractor Injury NLI - Lossons Learned NLI - Lequipment Aunt Trip LI - Firat Aid LI - Equipment Fabure LI - Safety Systems and Relief Devices LI - Firat Aid LI - Firat Aid LI - Firat Aid LI - Firat Aid LI - Firat Run OutStow Down LI - Product Qualify (int) NLI - Mrd - Contractor	Level 1 Level 1 Level 1 Level 1 Level 1 Level 1 No Level Selected Level 1 Level 3 Level 1 Level 1 Level 3 Level 4 Level 4 Level 4 Level 5 Level 6 Level 6 Level 7 Level 7 Level 7 Level 7 Level 8 Level 8 Level 9	Level 1 Level 1 Level 1 Level 1 Level 1 Level 1 Level 2 Level 2 Level 2 Level 2 Level 1	On 3/16/10, P-202 fit pump at 82 separator failed a VOC Inspection. The VOC result was above the 50 Portable dieset engine driven pumps are used as part of No. 13 separator ED. One of these pumps was internal odors in the acoth end of the Refinery were detected ground 9:00 ant. At the time of the odo Sharty after completing an inspection of 82 Separator the employee jett initiation in his right eye.  While using a hammer to tap a stud out of a 167 flange the left index finget got caught between the There have been several recent hot condensate burns to plant personnel in the Chevron refining syste At approximately 13:00 11/27/03 a widow at \$1 Power Plant felt to the ground from about 20' do to Millio V-1018 was down and isolated for confined space entry for inspection, modification work for a While V-1018 was down and isolated for confined space entry for inspection, modification work for a While V-1018 was down and isolated for confined space entry for inspection, modification work for a Power contract employees and their company replaces securing an abstement job at \$1 Power and were go TDP INVESTIGATION-N2 HOSE RUPP TURED—Approximately 08:30 am \$1 Power Plant receives a call from the K-3 Utilities Air compressor shuddown while performing Low Oil Pressure Alarm test.  All approximately 10:00 am \$7 Botter tripped oif fine. Baller was immediately personal with enabling rounds. Up A1 approximately 10:00 am \$7 Botter tripped oif fine. Baller was immediately personal with no limp Only Wednesday, 1111 109, employee performed a light routine of exercise that included some pushous. \$1 Botter block valve to 8008 haaden has a leaking bonnet.  On Wednesday, 1111 109, employee benefit and the wind and passage has a leaking bonnet.  On the botter of the properties of the power Plant Boiler Operator (PPBD) smelled something burning and began to \$1 Boiler to enforce yet among the properties of the properties of the power plant began to \$1 Boiler. This is a pressure sealed bonne on 14 Feb 10 to he reflerely the among the pro	Richmond Refinery	Lükikes & Environmental (Rich)	Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Unitles (Rich)	Separators Separators Separators Separators Separators Separators Separators Separators  ### Power & Control House #### Power & Control House #### Power & Control House ####################################		
1595467   176557   176557   176557   1764334   1764334   1764334   1764334   1764334   1764334   1764334   1764334   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674   1765674	925/2009 97/2010 97/2010 97/2010 97/2010 97/2010 97/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009 11/27/2009		LI - NOV - Air  LI - Fire/Explosion LI - Germanny Inquiry LI - Fire X Aid MLI - Employee Injury NLI - Employee Injury NLI - Employee Injury NLI - Employee Injury NLI - Contractor Injury NLI - Contractor Injury NLI - Contractor Injury NLI - Lessons Learned NLI - Lessons Learned NLI - Lessons Learned LI - Equipment/Unit Trip LI - Fire/Explosion LI - Equipment/Unit Trip LI - Fire/Explosion LI - Equipment/Unit Trip LI - Equipment/Fire/LI - Equipment/Unit Trip LI - Equipment/Fire/LI - Equipment/Unit Trip LI - Equipment/Fire/LI - Equipment/Unit Trip LI - Safety Systems and Relief Devices LI - First Aid	Level 1 Level 1 Level 1 Level 1 Level 1 Mo Level Selected No Level Selected Level 1 Level 2 Level 3 Level 3 Level 3 Level 3 Level 4 Level 5 Level 6 Level 1 Level 1 Level 6 Level 6 Level 6 Level 6 Level 7 Level 8 Level 6 Level 1 Level 6 Level 7 Level 8 Level 6 Level 1 Level 8 Level 6 Level 6 Level 7 Level 8 Level 6 Level 7 Level 8 Level 6 Level 6 Level 6 Level 7 Level 7 Level 8 Level 7 Level 8 Level	Level 1 Lavel 1 Lavel 1 Lavel 1 Lavel 1 Lavel 1 Lavel 2 Lovel 2 Lovel 2 Lovel 2 Lovel 1 Level 1	On 31/810, P-202 fit pump at 82 separator failed a VOC Inspection. The VOC result was above the 50 Portable dieset lengths driven pumps are used as part of No. 13 separator Eth. One of these pumps was internal colors in the seath end of the Refinery were detected around 9:00 ant. At the time of the odo Shortly after completing an inspection of 82 Separator the employee left initiation in his right eye. While using a hammer to larp a stud out of a 15° flangs the felt index finery der david between the There have been several recent hot condensate burns to plant personnel in the Chevron refining syste. At approximately 13:00 11/27/03 a widow at 81 Power Plant field to the ground from about 20' do to M While V-701B was down and Isalated for confined space entry for Inspection, modification work for a While V-701B was down and Isalated for confined space entry for Inspection, modification work for a While V-701B was down and Isalated for confined space entry for Inspection, modification work for a Four centrate displayers and their company rep were sequing an abstrance to be 18° Power and were go TOP INVESTIGATION-N2 HOSE RUPTURED—Approximately 08:30am, 81 Power Plant neceives a call from the K-3 Utilities Air compressor shudown while performing Low Oil Pressure Alami test. All approximately 18:30 the Power Plant Boiler Operator (PSPD) smelded smoke while making rounds. Up At approximately 18:30 the Power Plant Boiler Operator (PSPD) smelded smoke while making rounds. Up At approximately 18:00 or m 87 Boiler tripped off fine. Bailer was immediately re-stated with no inno On Wednesday. 1111 10:9, employee performed a light routine of exercise that included some pushups, 31 Boiler Mock valve to 8006 hadoer has a haking bonnel.  During normal Power Plant operation, it was requested to start up additional bodiers due to the incr.  Baineri gasket lack on main block pressure seal valve or at 4 boiler. This is a pressure sealed bonne.  On 14 Feb 10 the refinery steam system stated to swing thrui end the year, As a result	Richmond Refinery	Lutilités & Environmental (Rich)	Environmental (Rich) Utilities (Rich)	Separators Separators Separators Separators Separators Separators Separators Sumps #1 Power & Control House		
1595467   1756573   1756574   1756574   1756574   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   1756674   175667	9282009 911/2010 92/202010 911/2010 92/202010 92/202010 92/202010 92/20209 92/2010 92/20209 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010 92/2010		LI - NOV - Air  LI - Fire/Explosion  LI - Germanny Inquiry  LI - Fire X Aid  NLI - Employee Injury  NLI - Employee Injury  NLI - Employee Injury  NLI - Exployment Damage  NLI - Non-Compilarine Company Policy  NLI - Contractor Injury  NLI - Contractor Injury  NLI - Lessons Learned  NLI - Lessons Learned  LI - Equipment/Unit Trip  LI - Fire/Explosion  LI - Equipment/Link Trip  LI - Fire/Explosion  LI - Safety Systems and Relief Devices  LI - First Aid  LI - Equipment/Link Trip  LI - Fire/Explosion  LI - Safety Systems and Relief Devices  LI - Safety Systems and Relief Devices  LI - Safety Systems and Relief Devices  LI - First Aid  LI - Equipment/Link Trip  LI - Product Qualify (Int)  NLI - MYC - Contractor  LL - First Aid  NLI - Contractor  LLI - First Aid  NLI - Contractor  LLI - First Aid	Level 1 Level 1 Level 1 Level 1 Level 1 Level 1 Mo Level Selected No Level Selected Level 1 Level 2 Level 3 Level 3 Level 3 Level 4 Level 4 Level 5 Level 5 Level 5 Level 5 Level 5 Level 6 Level 6 Level 6 Level 7 Level 8 Level 1 Level 1 Level 9 Level	Level 1 Level 1 Level 1 Level 1 Level 1 Level 2 Level 2 Level 2 Level 2 Level 1	On 2/8/10, P-202 fit pump at 82 separator failed a VOC Inspection. The VOC result was above the 50 Portable diesellengine driven pumps was interested desellengine driven pumps was interested desellengine driven pumps was interested or the second of the Refinery were detected ground 9:00 ant. At the time of the odd on Sharty after completing an inspection of 82 Separator the employee jett initiation in his right eye. While using a hammer to trip a stud out of a 16° flange is the felt ladex floyed got caught between the There have been several recent hot condensate burns to plant personnel in the Chevron refining systia. 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The VOC result was above the 50 Portable dieset engine driven pumps are used as part of No. 13 separator Etb. One of these pumps was internal odors in the south end of the Refinery were detected ground 9:00 ant. At the time of the odo internal odors in the south end of the Refinery were detected ground 9:00 ant. At the time of the odo Shardy after completing an inspection of 82.8 separator the employee left initiation in his right eye.  While using a hammer to tap a stud out of a 16° flange the test index finget god caught between the There have been several recent hot condensate burns to plant personnel in the Chevron refining syste At approximately 13:00 11/27/03 a widow at \$1\$ Power Plant felt to the ground from about 20' do to Michile V-7018 was down and isolated for confined space entry for inspection, modification work for a While V-7018 was down and isolated for confined space entry for inspection, modification work for a Power securing an abstanced to the state of the security of the Power shart test.  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The VOC result was above the 50 Portable dieset lengths driven pumps are as used as part of No. 13 separator Eth. One of these pumps was internal orders in the seath end of the Refinery were detected around 9:00 ant. At the time of the odd Sharty after completing an inspection of 82 Separator the employee left initiation in his right eye. While using a harmony to just a stud out of a 15° flange the feet index finery of cause the tween the There have been several recent hot condensate burns to plant personnel in the Chevron refining syste. At approximately 13:00 11/27/03 a widow at 81 Power Plant field to the ground from about 20° do to M While V-701B was down and isolated for confined space entry for inspection, modification work for a While V-701B was down and Isolated for confined space entry for inspection, modification work for a Four centract employees and their company rep were securing an abstance to be 18 Power and were go TOP INVESTIGATION-INZ HOSE RUPTURED—Approximately 08:30am, 81 Power Plant receives a call from the K-3 Utilities Air compressor shuddown while performing Low Oil Pressure Alami test. All approximately 10:30 the Power Plant belief Operator (PSPD) smelded more while making rounds. Up At approximately 10:00 am 87 Botler tripped off fine. Bater was immediately re-started with no imp. On Wednesday, 111 1709, employee performed a Right routine of exercise that included some pushups, 31 Boiler block valve to 3000 Phage by Insert a salking bonnet. During normal Power Plant begins estal valve on the start of a post with the force of the finer. Bonnet gasket lake on main block pressure seal valve on the book valve to 3000 Phage by as a laking bonnet. On 14 Feb 10 the refinery seam system started in swing through the year that the finer. On 14 Feb 10 the refinery seam system started in swing through the year. As a result of refinery c As approximately 06:50 the Power Plant Boiler Operator (PBD) smelled something burning and bega	Richmond Refinery	Lutilités & Environmental (Rich)	Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Unitles (Rich)	Separators Separators Separators Separators Separators Separators Separators Separators Sumps \$1 Power & Control House CoGen CoGen CoGen CoGen CoGen CoGen CoGen CoGen Cortrol House		
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While using a hammer to tap a stud out of a 16° flange the test index finget god caught between the There have been several recent hot condensate burns to plant personnel in the Chevron refining syste At approximately 13:00 11/27/03 a widow at \$1\$ Power Plant felt to the ground from about 20' do to Michile V-7018 was down and isolated for confined space entry for inspection, modification work for a While V-7018 was down and isolated for confined space entry for inspection, modification work for a Power securing an abstanced to the state of the security of the Power shart test.  Provided the security of the security of the security of the specific modification work for a While V-7018 was down and isolated for confined space entry for inspection, modification work for a Power shart test of the security of th	Richmond Refinery	Lükkies & Environmental (Rich)	Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Unitles (Rich)	Separators		
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The VOC result was above the 50 Portable diesetlerights diven pumps are used as part of No. 13 separator ED. One of these pumps was internal octors in the acoth and of the Refinery were detected ground 9/00 ant. At the time of the odd on internal octors in the acoth and of the Refinery were detected ground 9/00 ant. At the time of the odd on Sharty after completing an inspection of 82 Separator the employee left initiation in his right eye.  While using a hammer to tap a stud out of a 16° flange the left index fined got caught between the There have been several recent hot condensate burns to plant personnel in the Chevron refining systia At approximately 13:00 11/27/03 a widow at \$1\$ Power Plant field to the ground from about 20′ do to M. While V-701B was down and isolated for confined space entry for inspection, modification work for a While V-701B was down and isolated for confined space entry for inspection, modification work for a While V-701B was down and isolated for confined space entry for inspection, modification work for a Poor Interfect employees and their company replaced security for inspection, modification work for a Poor Interfect employees and their company replaced security of the power and were go TOP INVESTIGATION-INP EDGE RUPT INCED—Approximately 98:30 am 31 Power Plant receives a call from the K-3 Utilities Air compensor shuddown while performing Low Cill Pressure Alarm test.  At approximately 10:30 the Power Plant Boiler Operator (PPBO) smelled smoke while making recurds. Up At approximately 10:00 am 37 Boiler inspect of fine. Boiler was immediately re-stande with no limp On Wednesday, 1111 109, employee performed a light routine of exercise that included some pushups, 31 Boiler block valve to 8008 hander has a leaking bonnet.  Ourlog normal Power Plant operation, it was requested to start up additional boilers due to the incr Bonnet pasket leak on main block pressure seal valve on 44 boiler. This is a pressure sealed bo	Richmond Refinery	Lukikies & Environmental (Rich)	Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Unitles (Rich)	Separators		
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The VOC result was above the 50 Portable dieset lengths driven pumps are used as part of No. 13 separator Eth. One of these pumps was internal colors in the seath end of the Refinery were detected around 9:00 ant. At the time of the odd Shortly after completing an inspection of 82 Separator the employee left initiation in his right eye. While using a harmony to just a stud out of a 15° flange the felt index finery of cause the tween the There have been several recent hot condensate burns to plant personnel in the Chevron refining syste. At approximately 13:00 11/27/03 a widow at 81 Power Plant felt to the ground from about 20° do to M While V-701B was down and isolated for confined space entry for inspection, modification work for a While V-701B was down and Isolated for confined space entry for inspection, modification work for a Four centract employees and their company rep were securing an abstances job at 81 Power and were go TOP INVESTIGATION-N2 HOSE RUPTURED—Approximately 08:30 km, 81 Power Plant receives a call from the K-3 Utilities Air compressor shuddown while parforming Low Oil Pressure Alami test. All approximately 10:30 the Power Plant belief Operator (PSPD) smelded snoke while making rounds. Up At approximately 10:30 the Power Plant Biolist Operator (PSPD) smelded snoke while making rounds. Up At approximately 10:00 am #7 Botter tripped off fine. Baler was immediately re-stated with no imp. On Wednesday, 1111 109, employee performed a Self routine of exercise that included some pushups, 31 Botter block varie to 8008 hadden has a hasking bornout.  During normal Power Plant operation, it was requested to start up additional bodiers due to the frice. Bonnet gasket lack on main block pressure seal valve on the bodier. This is a pressure sealed bonne On 14 Feb 10 the refinery steam system stated in swing through the search set that from the formation of the first process of deloading TG800 for scheduled PRC repair the fautty PRD little	Richmond Refinery	Lutilités & Environmental (Rich)	Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Unities (Rich)	Separators		
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The VOC result was above the 50 Portable dieset engine driven pumps are used as part of No. 13 separator Etd. One of these pumps was internal octors in the acoth and of the Refinery were detected ground 9:00 ant. At the time of the odd on Sharty after completing an inspection of 82 Separator the employee left initiation in his right eye.  While using a hammer to tap a sturk out of a 16* Banga the test index finget got caught between the There have been several recent hot condensate burns to plant personnell in the Chevron refining systia. 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The VOC result was above the 50 Portable dieset lengths driven pumps are used as part of No. 13 separator Etd. One of these pumps was internal doors in the seath end of the Refinery were detected around 3:00 ant. At the time of the odd Sharty after completing an inspection of 82 Separator the employee jett instation in his right eye. While using a harmory to large a stud out of a 15° flange the felt index finery det audit between the There have been several recent hot condensate burns to plant personnel in the Chevron refining syste. At approximately 13:00 11/27/03 a widdow at 81 Power Plant felt to the ground from about 27 of 10 M While V-701B was down and isolated for confined space entry for inspection, modification work for a While V-701B was down and listlated for confined space entry for inspection, modification work for a While V-701B was down and listlated for confined space entry for inspection, modification work for a Pow centract employees and their company rep were securing an abstrance job at 81 Power and were go TOP INVESTIGATION-N2 HOSE RUPTURED—Approximately 08:36am, #1 Power Plant beceives a call from the K-3 Utilities Air compressor shudown while paratoming Low Oil Pressure Nami test. As approximately 10:30 the Power Plant Boiler Operator (PPSD) smalled at mole with making rounds. Up At approximately 10:30 am #7 Bolter tripped off fine. Baler was immediately re-stand with no imp On Wednesday. 11/1 10:9, emplayee performed a light routine of exercise that included some pushups. 31 Boller block varie to 800@ hadden has a haking bornot.  During normal Power Plant operation, it was requested to stant up additional boders due to the incompleting to the power plant block pressure seal valve on #4 boiler. This is a pressure sealed bornom On 14 Feb 10 the reflexy search strend Boiler Operator (PPBD) smelled something burning and began to ST800 5000 to he power plant Boiler operator (PPBD) smelled something burning and began to ST800 50	Richmond Refinery	Lutilités & Environmental (Rich)	Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Environmental (Rich) Utilities (Rich)	Separators		
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The VOC result was above the 50 Portable dieset lengths driven pumps are used as part of No. 13 separator 5th. One of these pumps was internal doors in the adult not of the Refinery were detected around 9/00 ant. At the time of the odo Shortly after completing an inspection of 82 Separator the employee jett initiation in his right eye. While using a hammer to larp a stud out of a 15° flange the tell finder finget got caught between the There have been several recent hot condensate burns to plant personnel in the Chevron refining syste. At approximately 13:00 11/27/03 a widow at 81 Power Plant field to the ground from about 20° do to with While V-701B was down and isolated for confined space entry for inspection, modification work for a While V-701B was down and isolated for confined space entry for inspection, modification work for a While V-701B was down and isolated for confined space entry for inspection, modification work for a Four contract employees and their company rep were securing an abstanced job or 81 Power and were go TOP INVESTIGATION-INZ HOSE RUPTURED—Approximately 08:30 km, 81 Power Plant receives a cell from the K-3 Utilities Air compressor shudown while performing Low Oil Pressure Alarm test.  At approximately 10:00 am 87 Boller tripped oil fine, Bafer was immediately re-started with no imp On Wednesday, 111/16/9, employee performed a Bight routine of exercise that included some pushurs, 31 Boller block valve to 3006 hadden as a leaking bornor.  On Wednesday, 111/16/9, employee performed a Bight routine of exercise that included some pushurs, 31 Boller block valve to 3006 hadden has a leaking bornor.  On 14 Feb 10 the refinery seam system started to awing through the soft shallow and select due to the Incc 300nnet gasket leak on main block pressure started to awing through the soft and pressure soled bornor.  On 14 Feb 10 the refinery seam system started to awing through the seam system was unstable due During the process of d	Richmond Refinery	Lukikies & Environmental (Rich)	Environmental (Rich) Utilites (Rich)	Separators		
1595467   1765254   1765254   1765254   1764324   1764324   1764324   1764324   1764324   1764324   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17667   17	928/2009 97/2010 97/2010 97/2010 97/2010 97/2010 97/2009 97/2010 97/2009 97/2010 97/2009 97/2010 97/2009 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010		LI - NOV - Air  LI - Fire/Explosion  LI - Fire/Explosion  LI - Germanny Inquiry  LI - Fire Xid  MLI - Employee Injury  NLI - Employee Injury  NLI - Employee Injury  NLI - Employee Injury  NLI - Room Company Policy  NLI - Room Company  NLI - Room Company  NLI - Lessons Learned  NLI - Lessons Learned  NLI - Lessons Learned  NLI - Equipment/Unit Trip  LI - Fire/Explosion  LI - Safety Systems and Relief Devices  LI - First Aid  LI - Contractor  LI - First Aid  NLI - Contractor  LI - First Aid  NLI - Susiness Process  LI - Business Process  LI - Business Process  LI - Spill  LI - Contractor First Aid  LI - Notice of Victation  LI - First Aid  LI - Notice of Victation  LI - First Aid  LI - Notice of Victation  LI - First Aid  LI - Spill  LI - Contractor First Aid  LI - Notice of Victation  LI - First Aid  LI - First Aid  LI - Spill  LI - Equipment/Unit Trip  NLI - Audolive Injection (Ed)	Level 1 Level 1 Level 1 Level 1 Level 1 No Level Selected Level 1 Level 3 Level 3 Level 3 Level 3 Level 3 Level 1 Level 1 Level 3 Level 4 Level 4 Level 5 Level 5 Level 5 Level 1 Level 5 Level 5 Level 1 Level 5 Level 6 Level 6 Level 6 Level 7 Level 7 Level 1 Level 6 Level 7 Level 7 Level 7 Level 7 Level 8 Level 9 Level	Level 1 Lavel 1 Lavel 1 Lavel 1 Lavel 1 Lavel 1 Lavel 2 Lavel 2 Lavel 2 Lavel 3 Lavel 1 Lavel 2 Lavel 1 Lavel	On 31/810, P-202 fit pump at 82 separator failed a VOC Inspection. The VOC result was above the 50 Portable dieset lengths driven pumps are used as part of No. 13 separator Etd. One of these pumps was internal doors in the seath end of the Refinery were detected around 3:00 ant. At the time of the odd Sharty after completing an inspection of 82 Separator the employee jett instation in his right eye. While using a harmory to large a stud out of a 15° flange the felt index finery det audit between the There have been several recent hot condensate burns to plant personnel in the Chevron refining syste. At approximately 13:00 11/27/03 a widdow at 81 Power Plant felt to the ground from about 27 of 10 M While V-701B was down and isolated for confined space entry for inspection, modification work for a While V-701B was down and listlated for confined space entry for inspection, modification work for a While V-701B was down and listlated for confined space entry for inspection, modification work for a Pow centract employees and their company rep were securing an abstrance job at 81 Power and were go TOP INVESTIGATION-N2 HOSE RUPTURED—Approximately 08:36am, #1 Power Plant beceives a call from the K-3 Utilities Air compressor shudown while paratoming Low Oil Pressure Nami test. As approximately 10:30 the Power Plant Boiler Operator (PPSD) smalled at mole with making rounds. Up At approximately 10:30 am #7 Bolter tripped off fine. 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The VOC result was above the 50 Portable diesellengins driven pumps was internal doors in the acuth end of the Refinery were detected around 9:00 ant. At the time of the color of the color internal doors in the acuth end of the Refinery were detected around 9:00 ant. At the time of the color of Sharty after completing an inspection of 82 Separator the employee jett initiation in his right eye. 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Up At approximately 19:30 the Power Plant operation, and the second smoke while making rounds.  9 At approximately 10:00 am 87 Bolicr tripped oil fine, Baler was immediately re-started with no limp On Wednesday, 1111 1679, employee performed a Bight routine of exercise that included some pushurs, still Bolier tokes what to 3006 hander has a laking bonnot.  On Wednesday, 1111 1679, employee performed a Bight routine of exercise that included some pushurs, still Bolier tokes what to 3006 handers has a laking bonnot.  On Life 10 the reflecty steam system started to swing through the su	Richmond Refinery	Lukikies & Environmental (Rich)	Environmental (Rich) Utilities (Rich)	Separators		
1595467 1736527 1764334 17764334 15764334 15764334 15784354 15788152 1959122 17756677 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135 1821135	928/2009 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010 97/2010		LI - NOV - Air  LI - Fire/Explosion  LI - Germanny Inquiry  LI - Fire Xid  MLI - Employee Injury  NLI - Employee Injury  NLI - Employee Injury  NLI - Employee Injury  NLI - Koortactor Injury  NLI - Contractor Injury  NLI - Lessons Learned  NLI - Lessons Learned  NLI - Lessons Learned  NLI - Lessons Learned  LI - Equipment/Unit Trip  LI - Fire/Explosion  LI - Equipment/Unit Trip  LI - Safety Systems and Relief Devices  LI - First Aid  LI - Plant Run Gut/Stow Down  LI - Product Quality (int)  NLI - MIVC - Contractor  LI - First Aid  NLI - Contractor Injury  LI - Equipment/Unit Trip  LI - Equipment/Unit Trip  LI - Equipment/Unit Trip  LI - Surit Aid  LI - Notice of Victation  LI - First Aid  LI - Notice of Victation  LI - First Aid  LI - Contractor First Aid  LI - Notice of Victation  LI - First Aid  LI - Contractor First Aid  LI - Roulpment Failure  LI - Contractor First Aid  LI - Equipment Failure  LI - Equipment Failure  LI - Contractor First Aid  LI - Equipment Failure  LI - Equipment Failure  LI - Equipment Failure  LI - Equipment Failure	Level 1 Level 2 No Level Selected Level 1 Le	Level 1 Lavel 1 Lavel 1 Lavel 1 Lavel 1 Lavel 1 Lavel 2 Lovel 2 Lovel 2 Lovel 3 Level 1 Level 2 Level 1 Level 1 Level 2 Level 1 Level 1 Level 1 Level 2 Level 1 Level 2 Level 1 Level 1 Level 1 Level 2 Level 1 Level 2 Level 1 Level 1 Level 2 Level 1 Level 1 Level 1 Level 1 Level 2 Level 1 Level 1 Level 1 Level 1 Level 1 Level 2 Level 1 Level	On 2/18/10, P-202 fit pump at 82 separator failed a VOC Inspection. 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Baler was immediately re-stated with no imp On Wednesday, 1117 1/99, emphytee performed a Spin routine of exercise that included some pushups, 31 Boiler Mock varie to 8008 hander has a haking bornout.  During normal Power Plant operation, it was requested to start up additional bodiers due to the face. Boilene gashed laws on another power plant begrated to swing through the spin shall be served to the face. Boilene gashed laws of the face gashed horizon and process of deloading ToSB00 for scheduled PRC repair the fautty	Richmond Refinery	Listicis & Environmental (Rich)   Environmental (Rich) Utilities (Rich)	Separators			

CONTROL	DATE OF	FORM	LOSS TYPE	ACTUAL LEVEL	POTENTIAL LEVEL	INCIDENT DESCRIPTION					LEVELS	LEVELG
1989974	7/20/2010	NU I	NU - Paperwork Incorrect/Not Sent	No Level Selected	Level 1	TOP INVESTIGATION-UNLABELED BARRELS-White conducting a Contractor Safety weekly audit on an excess	Richmend Refinery	Littities & Environmental (Rich)	Utilities (Rich)	Substations		
1339974	7/20/2010	NU I	NLI - Product Mis-Delivery	No Level Selected	Level 1	TOP INVESTIGATION-UNLABELED BARRELS-While conducting a Contractor Safety weekly audd on an excava	Richmond Refinery			Substations		
1582532	19/21/2009		Li-Spiff	Level 1	Lavel 1	The Old Quarry Substation transformer # 79 bank was stated to be removed for demo. When preparing u	Richmond Relinery	Utilities & Environmental (Rich)	Utilides (Rich)	Substations		
1948958	6/2/2010	(LI	LI - Product Quakty (Ext)	Level 1		A contractor while driving a 30 lach steel pipe pile with a bettern plate and tip in an overhead rest	Richmend Refinery			Substations		
1948958	6/2/2010	LL I	LI - Equipment Failure	Loyel 1	Lavel 1	A contractor while criving a 30 lach steel plas pile with a bottom pizts and tip in an overhead rest	Richmend Refinery	Litikies & Environmental (Rich)	Unlizies (Rich)	Substations		
1983220	7/19/2010	U I	Lt-Business Interruption	Level 2	Lavel 2	Loss of power to 480 V system at 2-A separator, 2.4 kV system at Penhux, and 480 V system at No. 4 R	Richmend Refinery			Substations		
1790729	1/18/2010	u	LI - Business Interruption	Level 1	Lavel 1	12.47 kV Power Outage Bus 1 at #1 Substation - #1 Substation is double ended so Bus 2 never lost go	Richmond Refinery			Substations		
1790735	1/18/2010	LI I	LI - Business interruption	Level 1	Lavel 1	Power Loss to 480 V Feeder 6-1 - pole line open wire slapped together and tripped 6-1 Breaker feedin	Richmond Refinery		Utilities (Rich)	Substations		
1793676	1/20/2010	ш	Li - Business Interruption	Level 1	Lavel 1	Loss at Power to 12.47 kV Xylene Feeder due to high winds, pole line open wire stapped logether and	Richmond Refinery			Substations		
1558509	7/21/2009	u	Li - Equipment Faiure	Leyel 1	Love; 1	Loss of electrical grid connection to MK-S0, FCC, Main Train Air Blower	Richmond Refinery		Utilities (Rich)	Substations		
1807427	1/29/2010	Li	LI - MVC - Company	Lavel 1	Level 1	Operator struck yellow pale with left front fender of a Chavron pick-up truck when entering the wash	Richmend Refinery	Utilities & Environmental (Rich)	Haz Waste Section	Wash Down Area		
1933781	5/22/2010	LI	LI - Contractor First Ald	Level 1	Lavel 1	Contractor reported Sunday moming from home to his superviser that he back disconfort. The contract	Richmond Refinery	Utiltigs & Environmental (Rich)	Haz Wasta Section	Wash Down Area		
1569483	7/28/2009	u	LI - Contractor First Aid	Level 1	Lavel 1	in the morning as the vacuum truck driver was stepping down from his truck he missed the last step a	Richmend Refinery	Utilities & Environmental (Rich)	Haz Waste Section	Wash Down Area		
1557366	7/18/2009	NLI	NLI - Centractor injury	No Level Selected	Level 1	Contract employee while eating her tunch, a piece of chicken stucked on her threat causing difficult	Richmond Refinery	Utilities & Environmental (Rich)	Haz Waste Section	Other		
1580618	8/5/2009	NLI	NLI - Lessons Leamed	No Level Selected	Lavel T	While opening the top hatch of a frac tank in order to gauge the tank two contractors' H2S monitors			Haz Waste Section	Other		
1715501	11/12/2009	MU	NLI - Contractor Injury	No Lavel Selected	Lavel 1	After unloading several bags of dry chemical processing additive from an clovated pallet to a stagin	Richmond Refinery	Utilities & Environmental (Rich)		Other		
1793582	1/19/2010	NU	NU - General Liability	No Level Selected	Level 1	Rear Loss:	Richmond Refinery	Utilities & Environmental (Rich)		Other		
1906197	4/24/2010	NLI	NU - Non-Compliance Company Policy	No Level Selected	Lavel 1	My partner and I went to the EOD Hazardous Waste Annex to electrically disconnect some equipment for				Other		
1660197	10/2/2009	Ų	LI - Spill	Lavei 1	Lavel 1	During the loading of clessi to a phase separator bin at the ramps -1 gallon of dissel leaked out of				Diher		
2020312	9/1/2010	Li	U - Product Contamination (inf)	Level 1	Lavel 1	Lt. Poly originating from V-691 that was being iransferred from a stabless steel temporary storage			Haz Waste Section	Other		
2012717	8/25/2010	U	LI - MVC - Contractor	Lovel 1	Level 1	Contractor was backing a tank into a berm at the north yard chem pad when he scrapped one of the yet			, 15-6 - 1, -41	Olher		
1871744	3/19/2010	LL .	LI - Equipment Camage	Level 1	Lavel 2	Bin damaged, during waste transfer. Sturgeon bin # 25927 damaged during transfer of waste from the			Haz Waste Section	Other		
1618015	2/8/2010	나	Li - Non-Industrial	Loyel 1	Level 1	A contractor was unloading empty drums out of the back of a semi truck when he stated he heard a "po			Hax Waste Section	Other		
1849890	3/2/2010	u	LI - Contractor First Ald	Level 1	Level 1	Contractor employee slipped and fell, injuring leg. At approximately 4:20pm, while walking along Cha				Other		
1895040	4/12/2010	LI (	Li - First Aid	Level 1	Lavel 1	The electricain lowered his taligate of his truck to remove a wood pallet, when he lowered the tailig	Richmond Relinery	Utilities & Environmental (Rich)	Haz Waste Section	Other		
1826917	2/16/2010	u	LI - Equipment Faiture	Level 1	Lavel 1	Approximately 5 gattene of sulfific caucitic leaked from the front flange, while filling the free tank	Richmend Refinery	Litities & Environmental (Rich)	Haz Waste Section	Other		
1647904	3/1/2010	u	Li - Contractor First Aid	Level 1	Level 2	EE was moving a skid from the Rain for Reni lay down yard. White the EE was doing a walk around he n	Richmond Refinery	Litities & Environmental (Rich)		Other		
1821142	2/10/2010	Ų	LI-Spīl	Lavel 1	Level 1	INITIAL REPORT—Less than 1 barret of dieselwater mixture spitled to ground. At 3:45pm on a Wednes	Richmend Refinery	Litities & Environmental (Rich)	Haz Waste Section	Other		
1577639	8/3/2009	ü	ப்- Spill	Level 1	Level 2	TOP INVESTIGATION TANK SPILL FROM MANWAY COVER AT HAZAROOUS WASTE TREATMENT YARD-TIME				Other		
1543818	7/8/2009	LI	LI - Business Process	Level 1	Level 1	Contract employee put Non-Haz Industrial debris into a HW 8in containing contaminated soil.	Richmond Refinery	Utilities & Environmental (Rich)	Haz Waste Section	Other		